L. 70 NO. 4

textile bulletin

APRIL · 15 · 1946

Detailed instructions for setting up an industrial medical department are contained in an article which will be found on Pages 36 and 38 of the current issue.

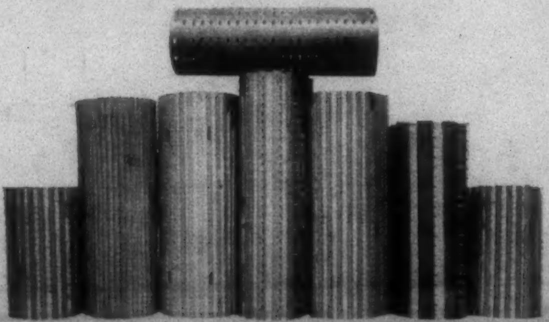
RESEARCH IN SOCIAL SCIENCE
BOX 539 JULY 46
CHAPEL HILL N C 2646

ARE YOUR PICKER APRONS **THE WEAK LINKS** IN YOUR PRODUCTION CHAIN?

Picker Aprons perform a most important function in the operation of Picking Machinery. If they are of poor quality, or are improperly constructed, they become weak links in your production chain, and troublesome delays and imperfect yarn invariably follow.

Our Picker Aprons are made of the highest grade materials and the assembling is performed by mechanics skilled in this exacting work. That's why they have established an enviable reputation for performance and long life in leading mills from Virginia to Texas.

☆ OUR APRONS LAST LONGER AND DO THE JOB BETTER ☆



☆ QUICK DELIVERY FOR STANDARD PICKERS FROM STOCK ☆

TROY WHITEHEAD MACHINERY COMPAN

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ADVERTISING INDEX—PAGE 71

No Wonder They're Perfect!

...they're tailor-made by experts, these

CHARLOTTE Long-Draft
SPINNING APRONS

They're accurately cut to fit your exact specifications in size and thickness, from carefully selected, highest grade calf skin. Skilled craftsmen with many years of experience handle every detail of their production. We repeat—no wonder they're perfect and are so famous for their outstanding performance in scores of southern mills.

Our convenient location in the very heart of the southern textile manufacturing area is an important factor in rendering "service when you need it."

CHARLOTTE
LEATHER BELTING COMPANY
CHARLOTTE, NORTH CAROLINA

Published monthly by Clark Publishing Co., Charlotte, N. C. Sent gratis to major officials and operating executives in Southern knitting mills. To others, subscription is $1.00 per year. Accepted under the Act of June 5, 1934, authorized Sept. 26, 1940.

FACTORING

More and more, the word "COMMERCIAL" is recognized as the "distinguishing mark" in factoring. It is the symbol of long experience, complete facilities and resources, and a knowledge of every branch of the textile industry.

We will gladly explain in detail what *COMMERCIAL FACTORING* can mean to your business in new opportunities and increased profits.

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Fred'k Vietor & Achelis, Inc.	Schefer, Schramm & Vogel	Peierls, Buhler & Co., Inc.
Established 1828	Established 1838	Established 1893

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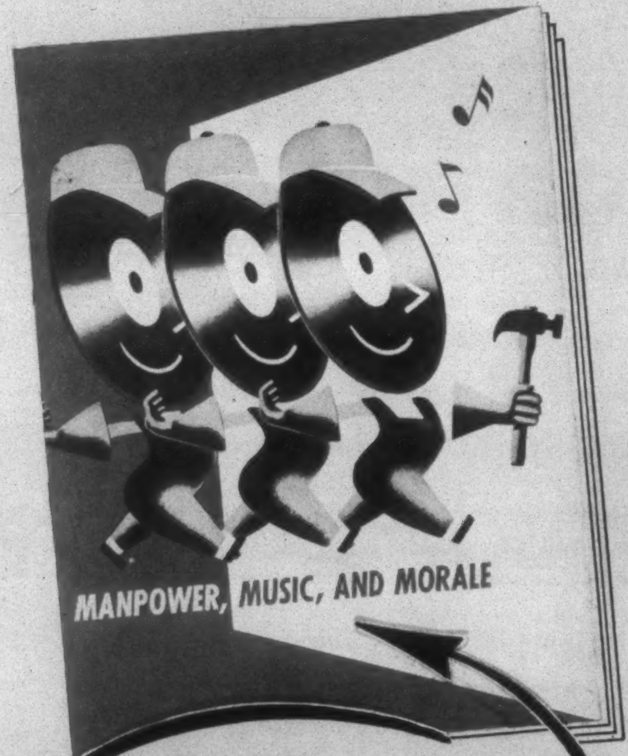
EUGENE G. LYNCH, 80 FEDERAL STREET, BOSTON, MASS.
T. HOLT HAYWOOD, WINSTON-SALEM, NORTH CAROLINA

How 17 Minutes of Music Stopped A Production Slump



FREE: This new 16-page book telling how to use music in industry, and what it can do for you. Ask for "Manpower, Music and Morale." Write to your RCA Distributor, whose address appears below.

EVERY afternoon, between 2:45 and 4:00 o'clock, production took a nose-dive at one particular plant. The reason: workers' nerves were getting on edge — fatigue was getting the best of them.

And then the management tried industrial music. A little in the morning — a little at noon—*and 17 minutes of it beginning at 2:45.* In less than 3 weeks, the production slump began to disappear — until it was finally gone. Now, an even production level can be maintained — and workers feel better!

This is not an unusual case—similar results are being obtained in war plants all over the country.

The use of *planned* industrial music has helped to reduce Monday-morning absences, to decrease petty ailments (headaches, etc.) caused by "jangled nerves," to improve productive efficiency, and to improve morale generally. These are measured, *proved* results—results that can be *reproduced.*

Music can be used even in a noisy plant.

RCA Industrial Music Service offers you great flexibility — in timing, in selection of music, and in type of service. The Victor and Bluebird industrial library has been carefully selected from the vast RCA Victor treasure house of the world's best-loved music. You also get the benefit of RCA psychological research in industrial music and its application.

RCA **INDUSTRIAL MUSIC SERVICE**

BUY MORE VICTORY BONDS

SOUTHERN RADIO CORPORATION
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distributor for North and South Carolina

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Mr. Loomfixer:

Your Wartime Troubles from Loose Shuttle Screws are over.

Wartime Shuttle Screws were made from inferior steel and were fitted with steel nuts. These steel nuts did not hold as firmly as brass nuts. They were all we could get. We bought them from outside sources because restrictions on bar steel prevented us from making and furnishing our regular product.

A Pre-War Product to Be Proud Of

Our Pre-War Shuttle Screws were turned from solid steel bars on our special automatic screw machines. They were fitted with brass nuts.

They were—and still are—an ideal combination for the purpose for which they are made—to hold your shuttle springs firmly in place.

You have been longing for Pre-War Shuttle Screws.

They Are Here.

They are not a "Post-War" product. They are a pre-war product that HAS COME BACK to give you the service you have Missed since they Became a War Casualty.

Draper Corporation
Atlanta Hopedale Spartanburg

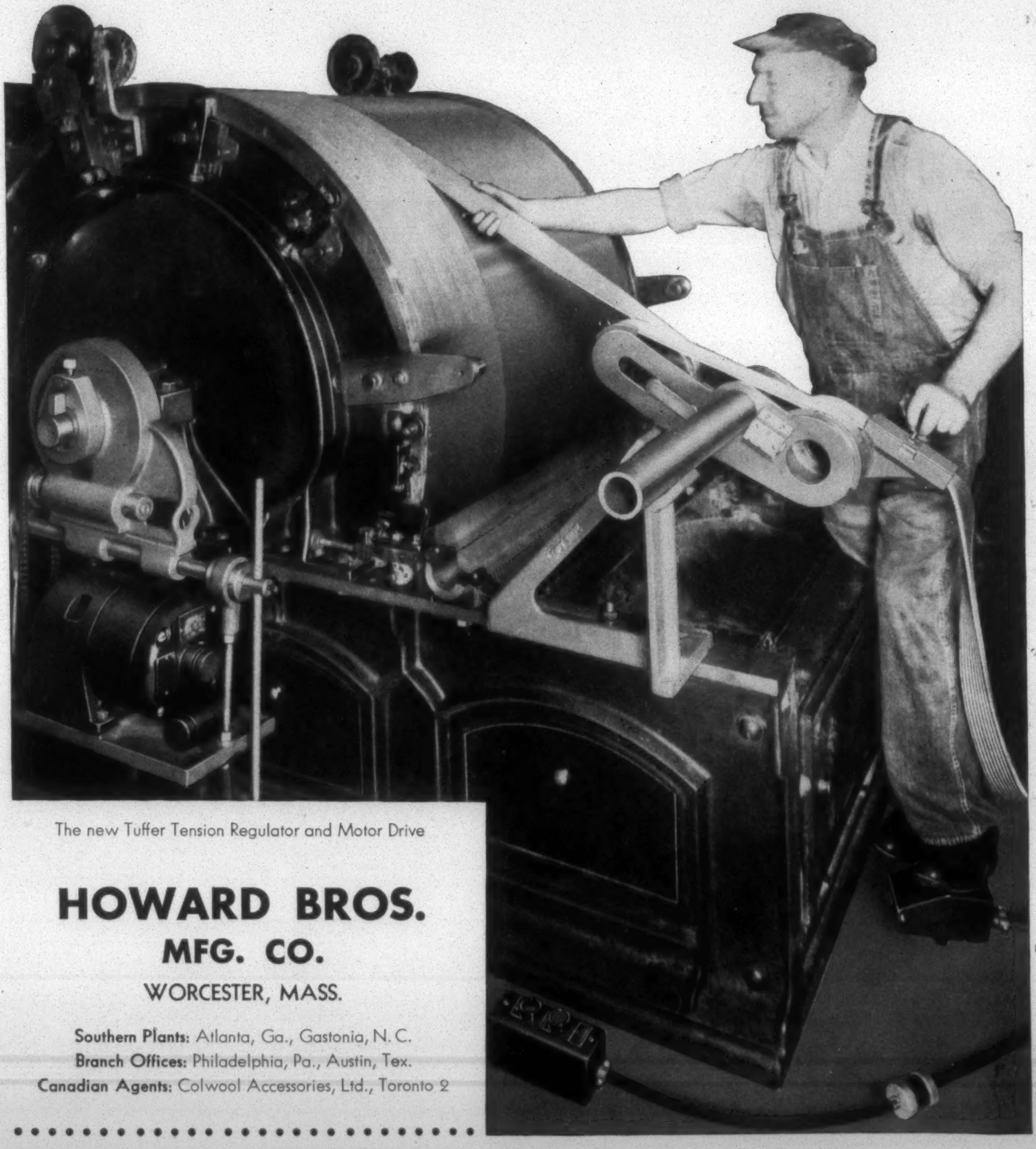
What Investment Promises More?

The uniformity and strength of yarns—to a large extent—determine operating efficiencies in the spinning and weaving rooms.

Proper carding is the *first step* toward strong, even yarns. Expertly applied and operated, Tufferized Card Clothing should materially improve the quality of your carding and increase the yield. It is guaranteed uniform because it is made by our exclusive patented precision process.

Where else would this relatively small investment have such a widespread, beneficial effect?

Use TUFFERIZED Card Clothing



The new Tuffer Tension Regulator and Motor Drive

HOWARD BROS.
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Southern Plants: Atlanta, Ga., Gastonia, N. C.
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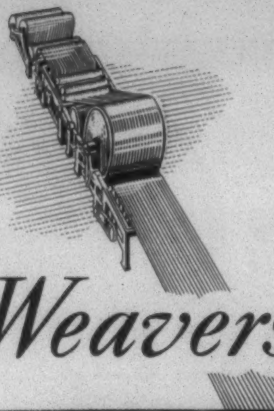

Weavers of Peru...

● The ancient Incas wove perfect tapestry double cloths, brocades, crepes and cloths of other weaves on their simple looms. With colored threads, they wove designs showing plants, animals and men with their sacred wildcat or puma appearing often. Their method of spinning cotton was remarkably similar to that used by the people of India.

Today—Staley Starches meet all requirements of weavability because they are under rigid laboratory control during every step of processing—a guarantee of uniform quality and performance from every shipment. Staley's complete line of starches meets the most exacting requirements for every textile use. Textile men enthusiastically approve Staley's high quality production and complete laboratory control. Use Staley Starches for year after year satisfaction.

Number Eight in a series published as a Tribute to the Development of Weaving through the centuries

In 1522, Pizzaro and De Soto found the Incas cultivating cotton and weaving fine fabrics with colored thread designs

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2 good CHEMICALS for COTTON

VIRGINIA SODIUM HYDROSULFITE

$Na_2S_2O_4$

VIRGINIA Hydrosulfite is a concentrated, white, stable, free-flowing uniformly crystalline powder, readily soluble in water. 100 lbs. of water at 68° F. will dissolve 21.8 lbs. $Na_2S_2O_4$. Easy and complete solubility, and carefully controlled particle size recommend VIRGINIA "Hydro" as a preferred reducing agent for vat dyeing and stripping. Shipped in air-tight steel drums, 250 lbs. net weight.

Shipment will be made from West Norfolk, Va., in Carload and Less Carload lots; L. C. L. shipments from stocks in Boston Chicago, New York, Philadelphia, Charlotte and Atlanta.

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Liquid SO_2

VIRGINIA "ESOTOO" is an ideal antichlor. Its popular adoption has followed the development of a practical semi-automatic method for regulating SO_2 concentrations in the sour box. Write for a complete description of the VIRGINIA method.

VIRGINIA "ESOTOO" is shipped in steel cylinders 150 lbs. net weight.

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WEST NORFOLK, VIRGINIA
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→ STRONGER YARNS
Superior lubrication.
Less fibre breakage.

→ SMOOTHER YARNS
Retain moisture control longer.
Aids artificial control.
Improve spinning.

→ BETTER LUBRICATION
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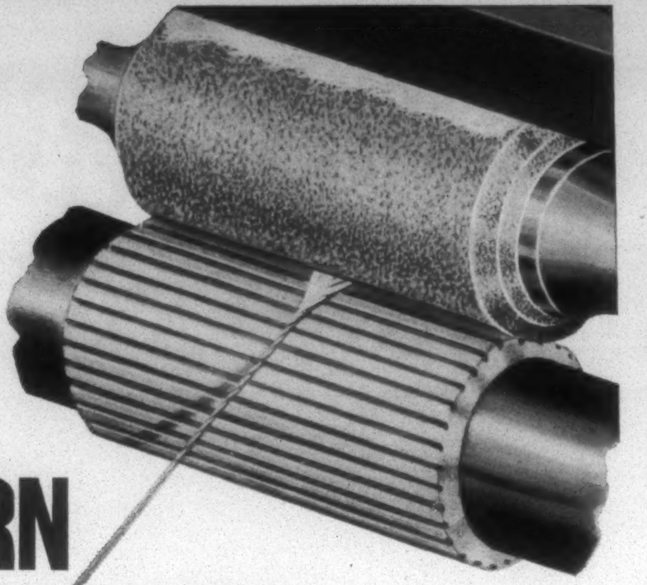


STRONGER YARN

. . . because this cork cot ***DRAFTS UNIFORMLY***

You get uniform drafting when you run on Armstrong's Cork Cots. Cork never slicks up, retains its superior grip throughout its entire service life. Thus these cots produce stronger, more uniform yarn.

Moreover, the consistently high friction of these cots eliminates eyebrowing. Clearer waste is placed back on the clearer boards where it belongs. This means fewer slubs in the yarn . . . less clearer picking.

Armstrong's Cork Cots are extraordinarily resilient, "come back" quickly after pressure by top roll laps or hard ends. They have no hard or soft spots to grip the yarn unevenly. And they maintain a true drafting surface because they do not flow under roll weighting.

These cots keep all these exceptional spinning qualities throughout a long initial life. When they do show signs of wear, they can be rebuffed—made like new—for three or four *extra* service lives. Each rebuffing costs as little as one half cent per roll.

See your Armstrong representative for the full story on how Armstrong's Cork Cots can help you produce better running work and increase poundage. Or write today to Armstrong Cork Company, Textile Products Department, 8204 Arch Street, Lancaster, Pennsylvania.

ARMSTRONG'S CORK COTS ARE

- LONG-LIVED
- HIGHLY FRICTIONAL
- EXTRA RESILIENT
- UNIFORM
- SEAMLESS
- TRULY COMPRESSIBLE
- IMPERVIOUS TO OILS AND DYES

BETTER RUNNING WORK

—MORE POUNDAGE

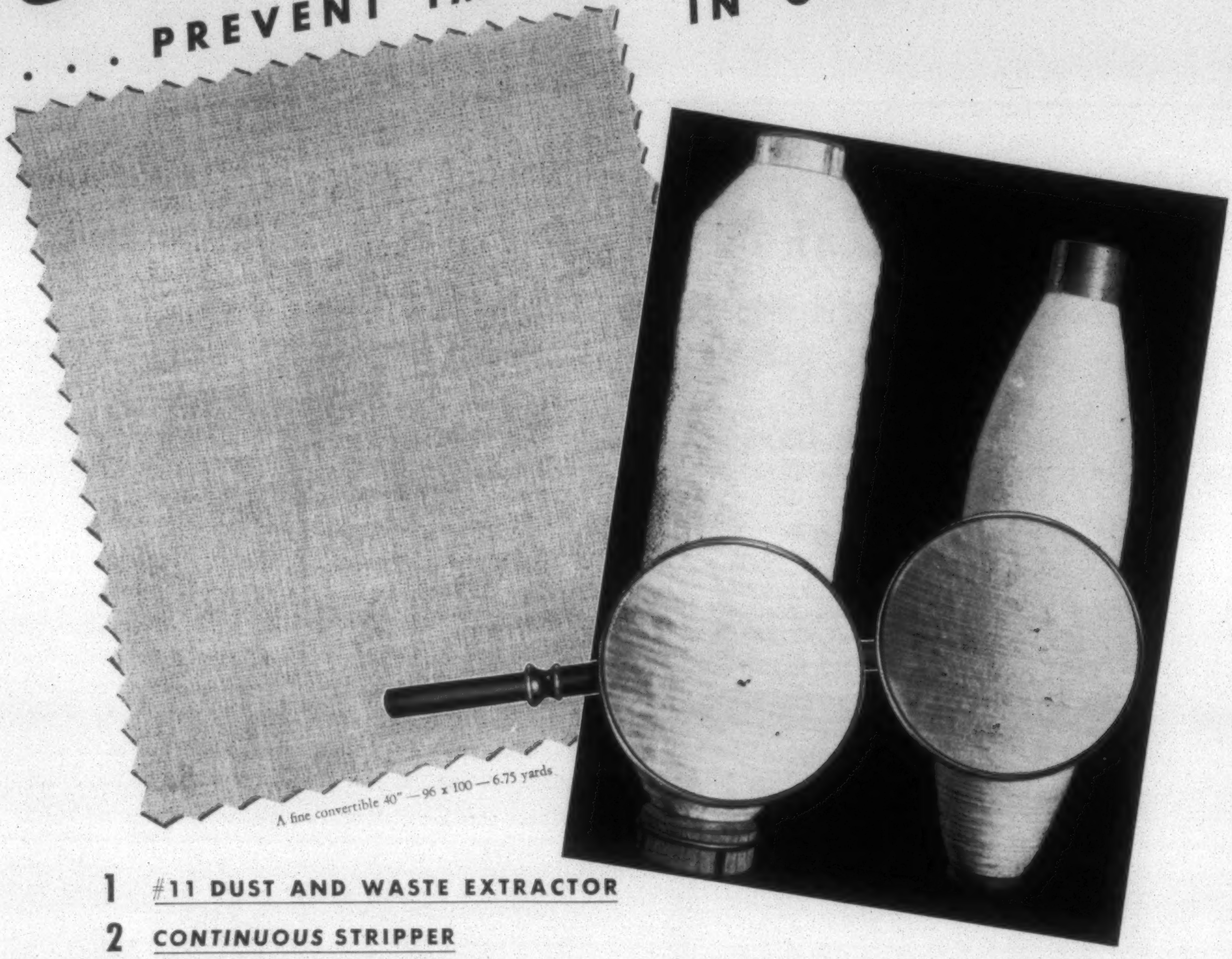
ARMSTRONG'S

CORK COTS

ACCOTEX COTS • ACCOTEX APRONS

3 HELPS TO CLEANER CLOTH

. . . PREVENT IMPURITIES FROM HIDING IN GOOD YARN


A fine convertible 40" — 96 x 100 — 6.75 yards

1 **#11 DUST AND WASTE EXTRACTOR**

2 **CONTINUOUS STRIPPER**

3 **WASTE CONTROL SCREEN**

It doesn't take any more time to make cleaner yarn than it does to make yarn which is packed with nep, leaf and other foreign particles. And while no process has yet been developed which will remove every single impurity, many that do "get by" can be removed before it is too late.

Saco-Lowell has developed three effective units which maintain a constant attack on these impurities.

First is the Saco-Lowell #11 Dust and Waste Extractor which removes the great bulk of fine, peppery leaf, nep and dirt.

The next point of attack is at the card. Here, by using a "combat team" composed of the Continuous Stripper and the Waste Control Screen, it is possible to keep the cylinder wire in such an active condition that there is a definite reduction in the amount of nep, leaf and other impurities in the web.

As a means of estimating the amount of impurities that are now "getting by" we suggest you make a nep and leaf count on ten square inches of cloth. Should you find this count too high our engineers may be able to make some helpful recommendations.

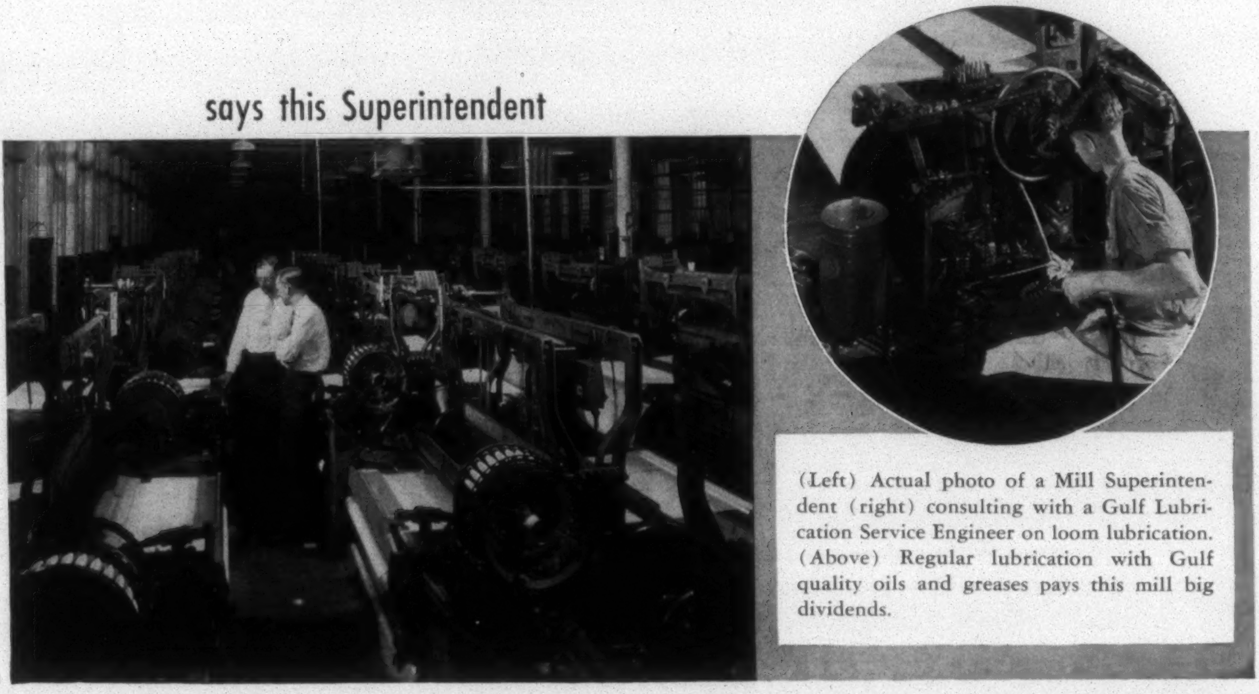
Saco-Lowell Shops

BOSTON, MASSACHUSETTS • Charlotte, Greenville, Atlan

"With Gulf Quality Lubricants

every loom produces its full quota of yardage—month in and month out!"

says this Superintendent



(Left) Actual photo of a Mill Superintendent (right) consulting with a Gulf Lubrication Service Engineer on loom lubrication. (Above) Regular lubrication with Gulf quality oils and greases pays this mill big dividends.

"GULF QUALITY LUBRICANTS not only help us keep maintenance costs at an exceptionally low figure, but enable us to get full production each month from every loom," says this Mill Superintendent. "Thanks largely to proper lubrication, we haven't had a loom down for repairs for over three years—and our looms are high speed, operating 120 hours per week!"

Gulf Quality Lubricants are writing a list of tangible benefits in the operating records of hundreds of mills from Maine to New Mexico. This "dividend" list includes less wear, improved efficiency, reduced fire hazard, lower maintenance costs, and greater production.

Call in a Gulf Lubrication Service Engineer today and ask him to recommend the right lubricant and its proper application for each bearing and moving part in your mill. You can rely upon his recommendations—they are based on broad experience with equipment similar to yours.

Gulf Oil Corporation · Gulf Refining Company

Division Sales Offices:
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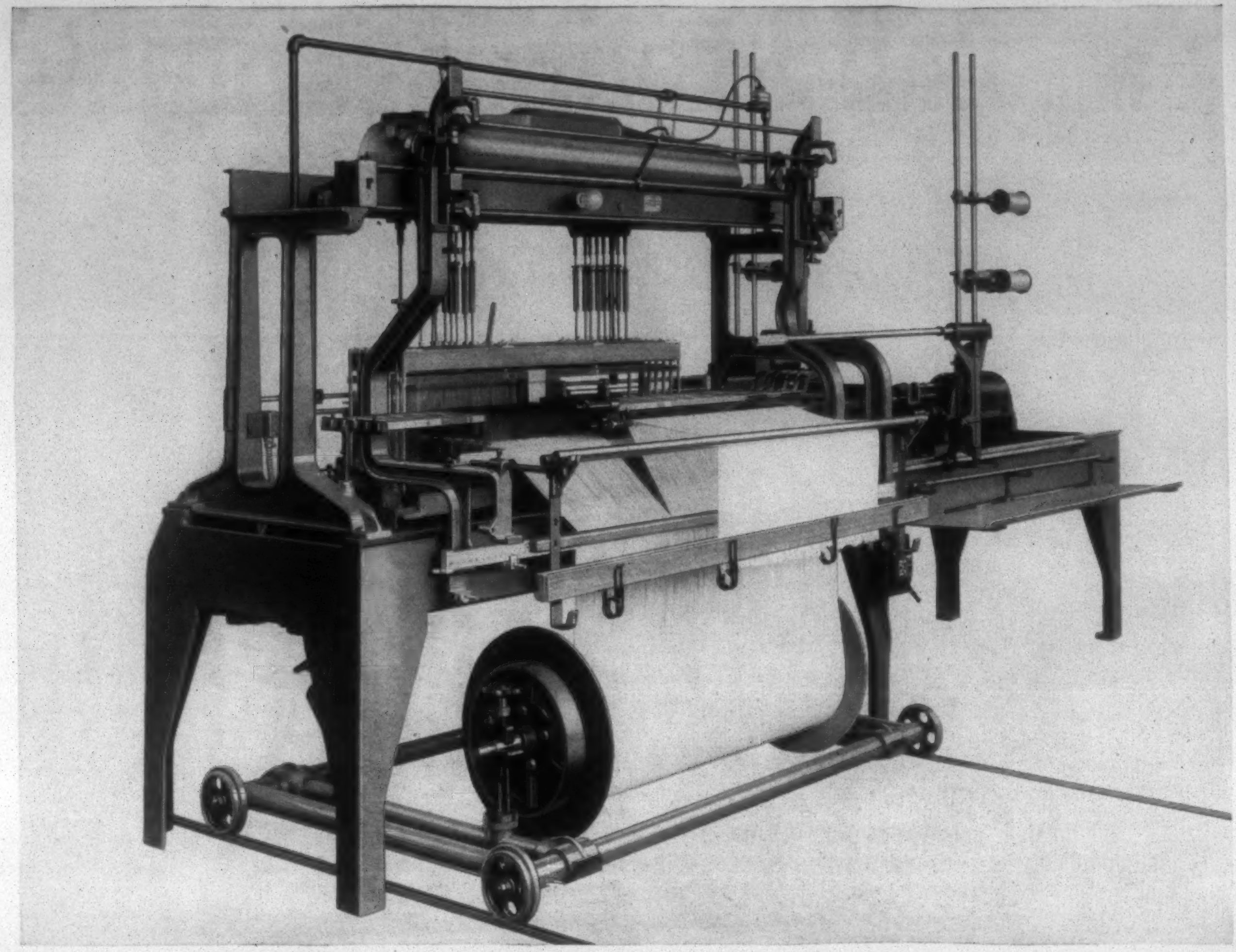
GULF INDUSTRIAL LUBRICATION



GREATER CAPACITY FOR DRAWING-IN WORK

This new Barber-Colman Drawing-In Machine provides greater capacity to handle high sley warps and fancy patterns characteristic of modern goods. The machine is made in several sizes and capacities up to a maximum of 120" reed width to draw *up to 24 harnesses, 8 banks of drop wires, and reed.* It can be used on rayon, cotton, or wool — and therefore is applicable in all types of weaving mills. The machine is fast, and the correct heddle is automatically selected for each end according to a punched sheet-metal pattern strip. In rayon mills especially, where frequent harness-cleaning is a necessity, this machine will effect substantial savings in time and expense over the slower and costlier method of hand drawing-in. It can handle a wide variety of work, as it is designed to draw warps from a flat sheet, split sheet, double beam, or one and one lease. Flat steel heddles, designed to float freely the full length of the heddle bar, are used. For an estimate showing the savings to be made by use of this machine on the type of work now in your mill, see your Barber-Colman representative.

AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • DRAWING-IN MACHINES

BARBER-COLMAN COMPANY

ROCKFORD • ILLINOIS • U. S. A.

FRAMINGHAM, MASS., U. S. A. GREENVILLE, S. C., U. S. A. MANCHESTER, ENGLAND

Chemical reactions that unlock the rainbow's spectrum from stygian tar oil can be defined precisely. But techniques of producing aniline dyes and applying them with unfailing accuracy of hue and shade — these are elusive as the subtle lines of a couturier's creation.

Oldest and only American producer of every class of aniline dye and color, National Aniline has accumulated a vast reservoir of dye application experience in every field where color is used . . . available through nearby National Technical Service.

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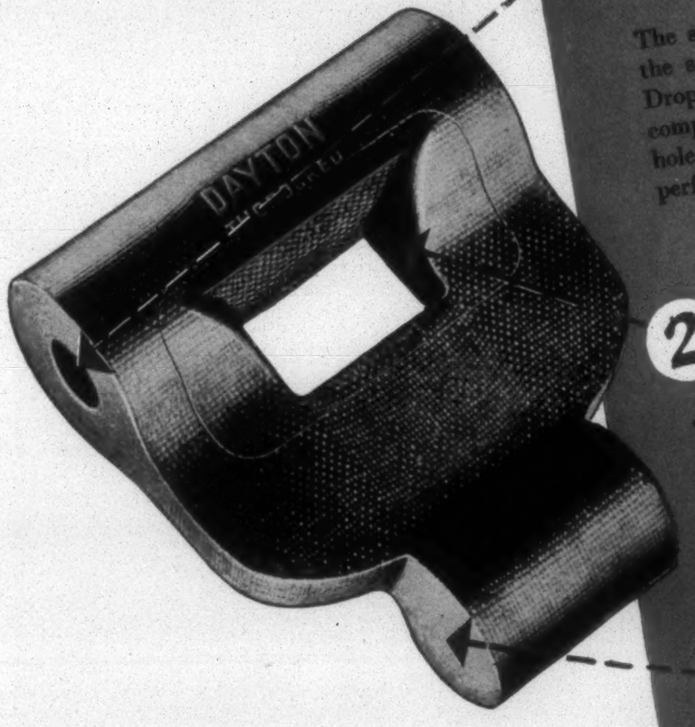
You get All Three IN A DAYTON PICKER



1 Extremely hard bearing surface

The specialized rubber and fabric around the spindle hole of a Dayton Reversible Drop Box Picker forms an extremely hard composition bearing. Result—the spindle hole, instead of wearing egg-shape, stays perfectly round.

2 Softer around picker stick hole

The impact of picker meeting shuttle is cushioned by a softer composition around the picker stick hole. Result—less wear on the stick and on the picker. The arrow point rests on the line that forms the outer edge of this cushion.

3 Still softer at shuttle contact

This section where the picker contacts the shuttle is the softest composition of all three. Result—elimination of shuttle point loosening, greater assurance of a perfect throw throughout the life of the picker.

Dayton Reversible and Nonreversible Pickers, and all other Dayton textile supplies, outlast and outperform because *we know how to build into rubber products the precise properties called for by the kind of work they do.*

To get the complete story of Dayton textile products write today for our new Textile Catalog.

THE DAYTON RUBBER MANUFACTURING COMPANY
FACTORY: WAYNESVILLE, N. C.
MAIN SALES OFFICES: WOODSIDE BUILDING, GREENVILLE, S. C.

Dayton Rubber

THE MARK OF TECHNICAL EXCELLENCE IN NATURAL AND SYNTHETIC RUBBER

FAMOUS DAYCO SYNTHETIC RUBBER PRODUCTS SINCE 1934

THIS IS NO. 56 OF A SERIES ON

GETTING THE MOST FROM WINDING

Information about winding designed to show improvements in winding equipment and new ideas in the winding operation

RATCHET FEED PAWL ARM ADJUSTER (No. 90 Winding Machine)

A new design of Ratchet Feed Pawl Arm Adjuster prevents any danger of the Adjuster becoming locked in front of the Pawl Arm Stop should the operator push in the Traverse Bar before setting the Bunch Builder.

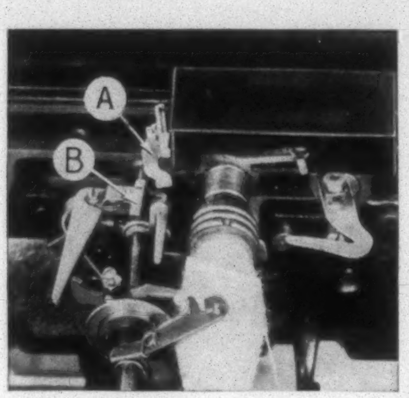


Fig. 1

Early models of the Bunch Builder Attachment (Fig. 1) used Arm Adjuster 90-1510 (A). When used with the now obsolete Pawl Arm Stop (B), it sometimes happened that, in starting the spindle, the forward motion of the Traverse Bar would bend the Stop as shown in Fig. 2. In order to unlock the adjuster, it was necessary to remove the Bunch Builder Cover and work the Ratchet to free the Adjuster.

A new type of Stop (C in Fig. 3) that is used as standard equipment today is much heavier than the old Stop and will not bend. Yet the possibility of the Adjuster (A) locking in front of the Stop still exists. Breakage of parts will be the result if the Adjuster is not freed before starting up again.

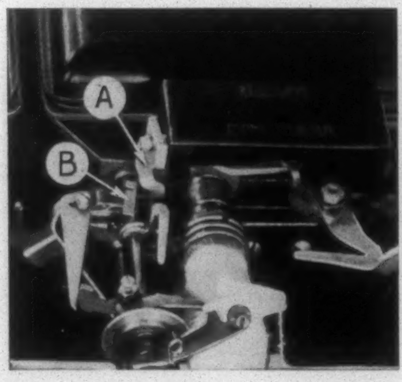


Fig. 2

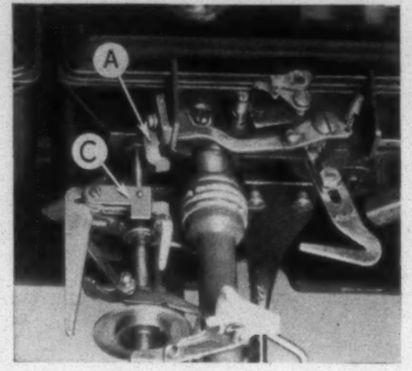


Fig. 3

However, the new Ratchet Feed Pawl Arm Adjuster 90-1510-7X (D in Fig. 4) eliminates the trouble completely. This adjuster is an assembly consisting of a Pawl which is pivoted on a Plate and is kept in position by a spring.

When the Bunch Builder has been set and the Traverse Bar is pushed inward, the Pawl is pressed to one side. As the Traverse Bar moves forward in starting, the spring returns the Pawl to its operating position, and the backward stroke of the Traverse Bar operates the Bunch Builder correctly.

With this Adjuster on the Bunch Builder, it is no longer necessary to be careful of the order in which the Bunch Builder is set and the Traverse Bar is pushed inward — thus saving time and eliminating the danger of breakage.

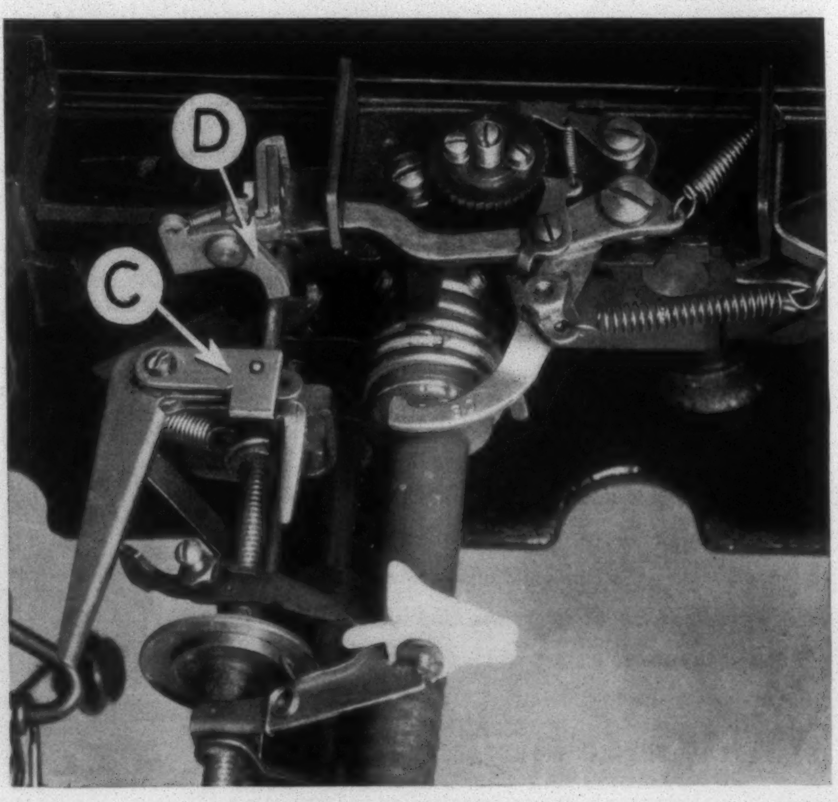


Fig. 4

*Reg. U. S. Pat. Off.

January 1946

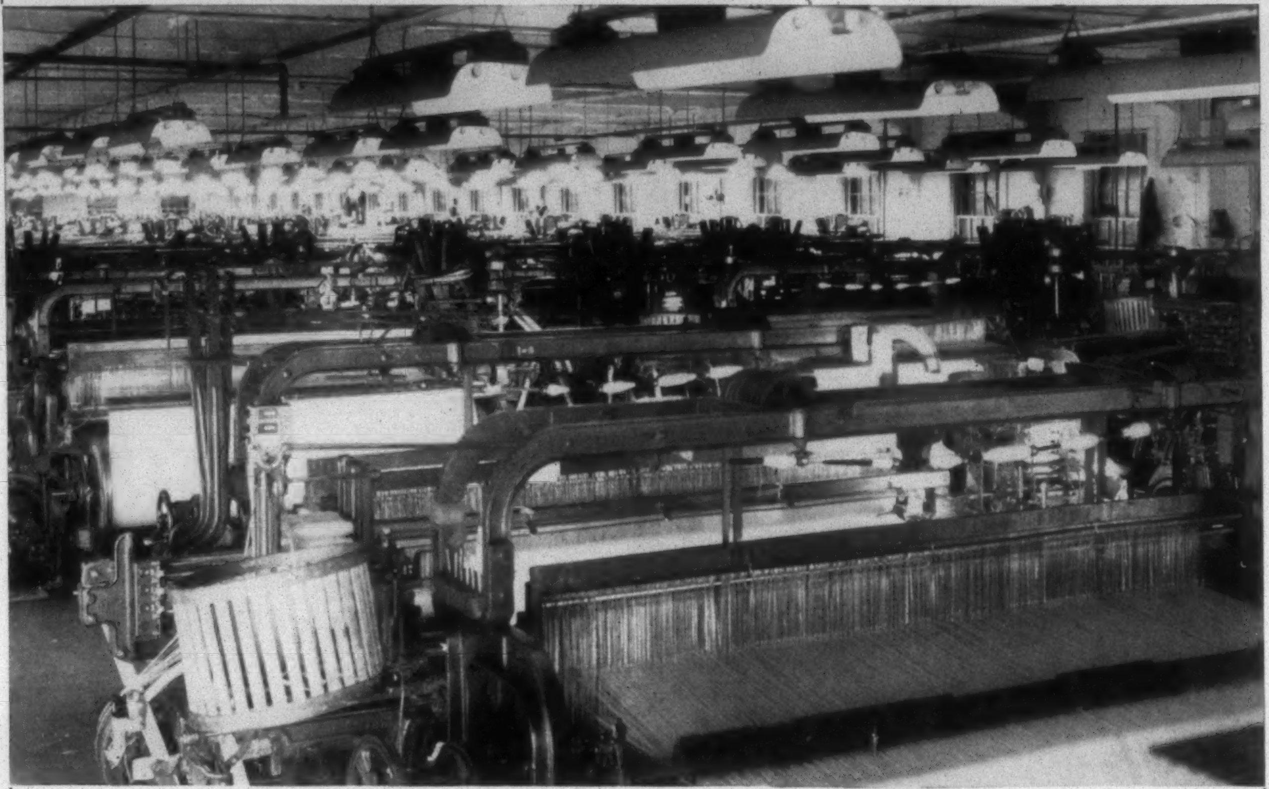
See our Catalog in TEXTILE WORLD YEARBOOK
23.5.14

"THERE'S A UNIVERSAL WINDER FOR EVERY TEXTILE NEED"

UNIVERSAL WINDING COMPANY

PROVIDENCE BOSTON PHILADELPHIA UTICA CHARLOTTE ATLANTA

THE REFLECTOR IS THE BACKBONE OF ANY LIGHTING SYSTEM...



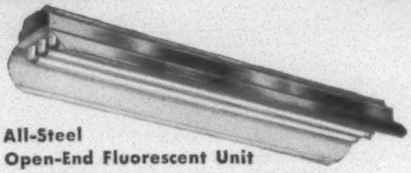
Skilled Work Needs *Skilled Lighting*

Blinding glare and uncertain shadow – by-products of faulty lighting – can mean costly production errors in plant operation. Give workers the help they need... a clear, even distribution of light... *Skilled Lighting*, the product of Wheeler's 64 years of specialized light engineering.

Wheeler Units are *engineered* to provide maximum light from standard lamps. Their high reflection factor puts light to work where it belongs – on the job. Their rugged construction insures long service – easy maintenance.

Learn how you can lighten workers' load with *Skilled Lighting*. Send for catalogs showing complete line of incandescent and fluorescent lighting fixtures. **Wheeler Reflector Company, 275 Congress St., Boston 10, Mass.** Also New York. Representatives in principal cities.

Distributed Exclusively Through Electrical Wholesalers



All-Steel Open-End Fluorescent Unit

Available for two or three 40-watt, or two 100-watt lamps. Broad wiring channel with accessible, enclosed ballast. Can be mounted from chain or conduit, individually or in continuous runs.

RLM Solid Neck Incandescent Reflector

Maximum lighting efficiency for either indoor or outdoor use. Expertly designed, ruggedly built. For 75 to 1500 watt lamps.

Wheeler *Skilled Lighting* REFLECTORS

Made by Specialists in Lighting Equipment Since 1881

a top name in flannels...uses

LAWRENCE SPINNA CALF

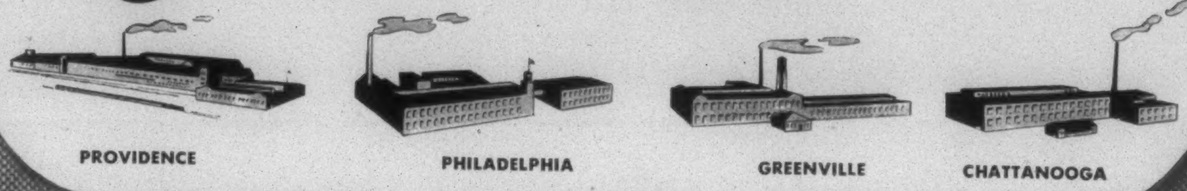
—the top name in roll covering

When you can be sure of a roll covering that has the right frictional surface required for smooth, sure drafting... is non-sweating... and will hold its shape and "body" despite the constant pressure and friction of the yarn... there's no need to experiment. Many "big name" mills insist that nothing takes the place of calfskin for fine spinning—and Lively Spinna Calf has become, through the years, the most generally used calfskin. Tell your roll coverer you want Spinna.

A. C. Lawrence Leather Company, Peabody, Mass. Manufacturers of Lawrence Calfskins — *1st choice for aprons.* Represented by H. H. Hersey, Greenville, S. C.

EVERY YEAR MORE PEOPLE DECIDE LEATHER IS BEST

Conveniently yours



A 4 PLANT YARN DYEING SERVICE

A telephone call or letter can put you in contact with the Franklin Process Yarn Dyeing Service. The most complete service of its type now available, it includes assistance in obtaining yarn and help in color selection if desired.

All four of the strategically located Franklin Process plants, with a total capacity of 600,000 lbs. a week, cooperate to handle each order, and the one, or more, plants which can serve you best at the time do so; delivering the yarn on put-ups best fitted to your specific requirements. Regardless of which of the four plants fills your order, color quality will be the same, for all four use the same formulas for standard shades, and the same dyeing equipment, the famous Franklin Process Dyeing Machines.

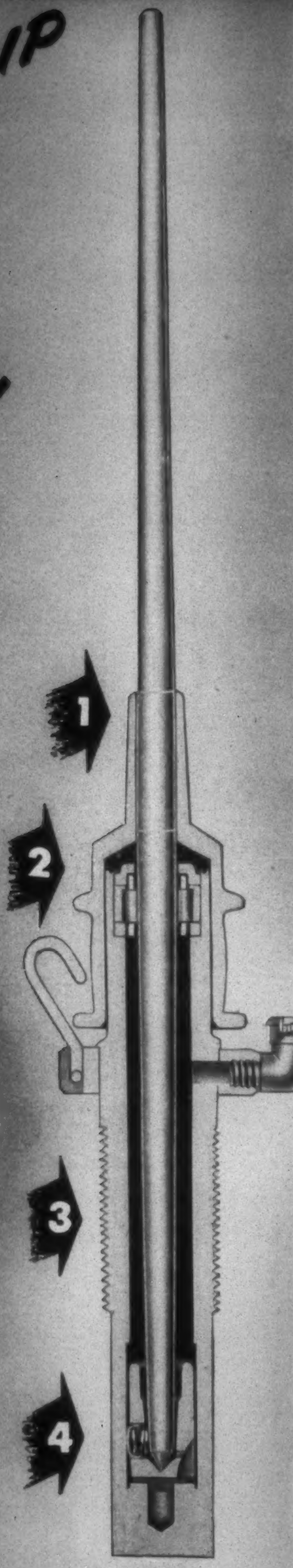
Why not make the Franklin Process Yarn Dyeing Service "Conveniently Yours" NOW?

Franklin Process

LARGEST PACKAGE DYERS IN THE WORLD
Providence • Philadelphia • Greenville
Chattanooga
New York Representative, 40 Worth Street

WHY... PRODUCTION GOES UP MAINTENANCE COSTS GO DOWN

IN MILLS EQUIPPED WITH Marquette ROLLER BEARING SPINDLES



Here's the "Inside Story"

1. The blade and whorl are "precision balanced" to run true at high speeds. All wearing surfaces are lapped to insure smoothness and long life.
2. The bolster bearing is of the roller-type—proven superior to any other type of bearing for carrying the radial load. It is of oversized capacity and all wearing surfaces are ground and lapped.
3. An extra large, all steel bolster unit allows for a wide separation between the bolster and footstep bearings. This helps dampen vibration and makes for a cooler running spindle that uses less oil and requires a minimum of maintenance attention.
4. The full-floating feature of the footstep bearing "cushions" the lateral movement of the blade, reduces vibration and helps center unbalanced packages. Thus the spindle runs true and wear is minimized.

The features illustrated in the cutaway view of the standard Marquette Roller Bearing Spindle show why Marquettes cost less to run. They are especially designed to meet today's demand for high-speed efficiency—and precision-made to deliver longer service with a minimum of maintenance attention. Specify Marquettes—they're *best* in the long run!

Further information and catalogue will be sent upon request.

The Marquette METAL PRODUCTS CO.
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Manufacturers of: HYDRAULIC AND ELECTRIC WINDSHIELD WIPERS FOR AIRCRAFT
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ALKAMERCE, a Hartex product, is the ideal mercerizing penetrant, scientifically made to give you these advantages:

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- **May be dissolved directly in the mercerizing caustic.**
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- **Does not form a scum in the caustic.**
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- **Has low solvent effect on cotton waxes and pectins.**
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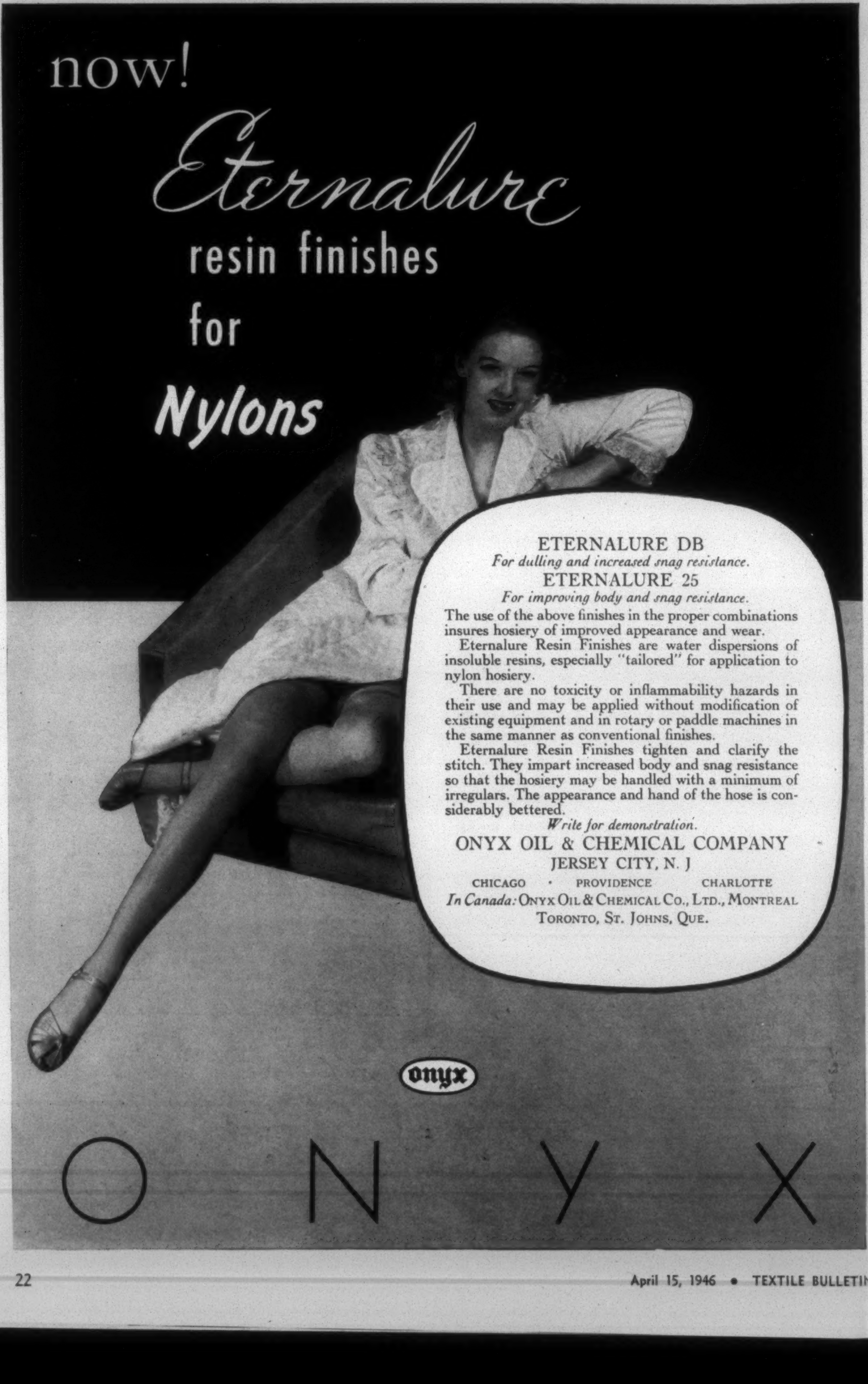

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There are no toxicity or inflammability hazards in their use and may be applied without modification of existing equipment and in rotary or paddle machines in the same manner as conventional finishes.

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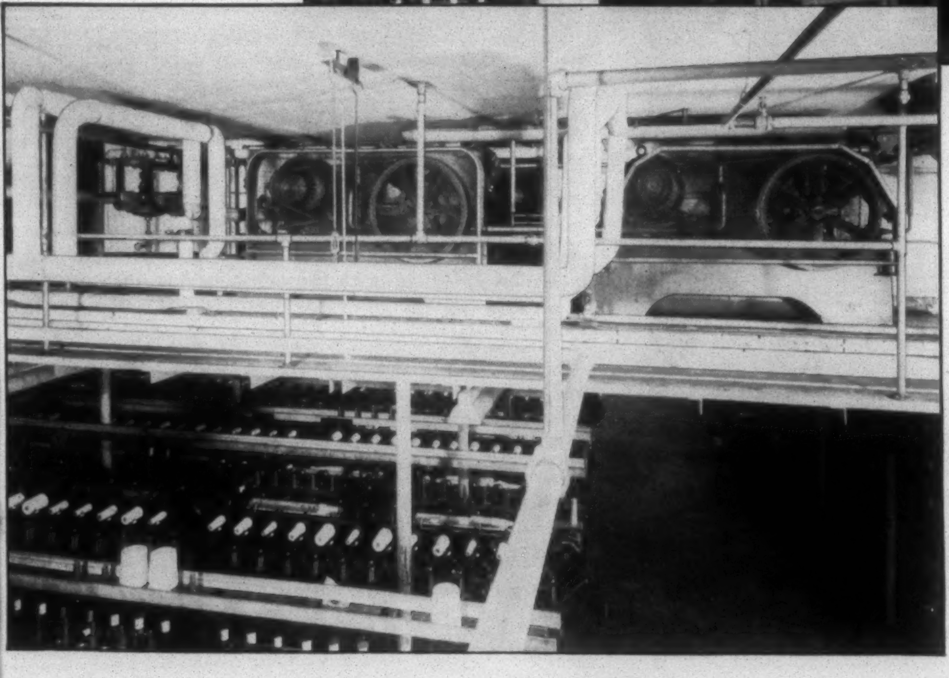

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Thanks to the cooperation and encouragement of America's industrial executives, 85 million bond holders have bought U.S. Bonds in the greatest savings program in history. Employees who have purchased billions of dollars of these bonds during the war now want to continue monthly purchases of savings bonds. Specific evidence of this desire to continue saving for personal security and prosperity through the Payroll Savings Plan was recently revealed by a survey which disclosed that 90% wanted the Plan continued.

Every employer can write in his own set of reasons why the Payroll Savings Plan should be continued as a part of his personnel relations program, but the principal advantages are obvious:

A large reservoir of national savings; a strong and stable bulwark against inflation.

An "automatic" thrift habit for the worker; to increase contentment and satisfaction in his job.

An opportunity for the employee to maintain his "share in America" with the safest, easiest, most profitable investment he can make.

An opportunity for the returned veteran to share in the Payroll Plan's varied benefits.

Your employees will require little "selling" on the idea—they are accustomed to their monthly saving habit. With the Treasury Department's savings bond program now in peacetime operation, your partnership is again invited to continue this systematic, convenient means of contribution to a prosperous peacetime future.

The Treasury Department acknowledges with appreciation the publication of this message by

textile bulletin

This is an official U. S. Treasury advertisement prepared under the auspices of the Treasury Department and Advertising Council

NOT TOMORROW...

TODAY!

These new Houghton processing products are here!

You've been promised many new developments in textile processing just as soon as war-time shortages of raw materials eased up. Those stringencies still exist, but despite them, Houghton has a number of both new and war-stymied products now available. They include:

HOUGHTO-WAX

A special wax compound developed as an aid to cotton warp sizing solutions to produce finer fibre lay and a smoother weaving warp. Added to regular sizing formula.

VELVETOL F. H.

A paste-type softener which replaces ordinary stearic acid softening materials. "F. H." stands for *full hand*. This product is practically neutral, contains no free fatty acid, and will not oxidize nor turn rancid in the finished fabric.

LANOLUBRIC 214

A stock lubricant for wool, which emulsifies readily, producing a thin emulsion of small particle size. Non-oxidizing, easily scoured, low in moisture content. This is a blend of saponifiable and unsaponifiable oils, usable for high grade yarns as well as for fabrics receiving a heavy scouring.

N-100

A liquid synthetic detergent again available; possesses high wetting efficiency, is free rinsing, will not be precipitated in hard water. One pound scours as well as 4 or 5 pounds of "neutral" soaps. Recommended for all types of alkaline scouring in hard or soft water.

SURFAX L. X.

A further development in the Surfax line of wetting and re-wetting agents. Excellent as a sanforizing or dyebath assistant, and noted for its economy.

SILKLUBRIC

Silk is attempting a comeback, and Houghton's prewar conditioning and silk soaking oils are again in demand.

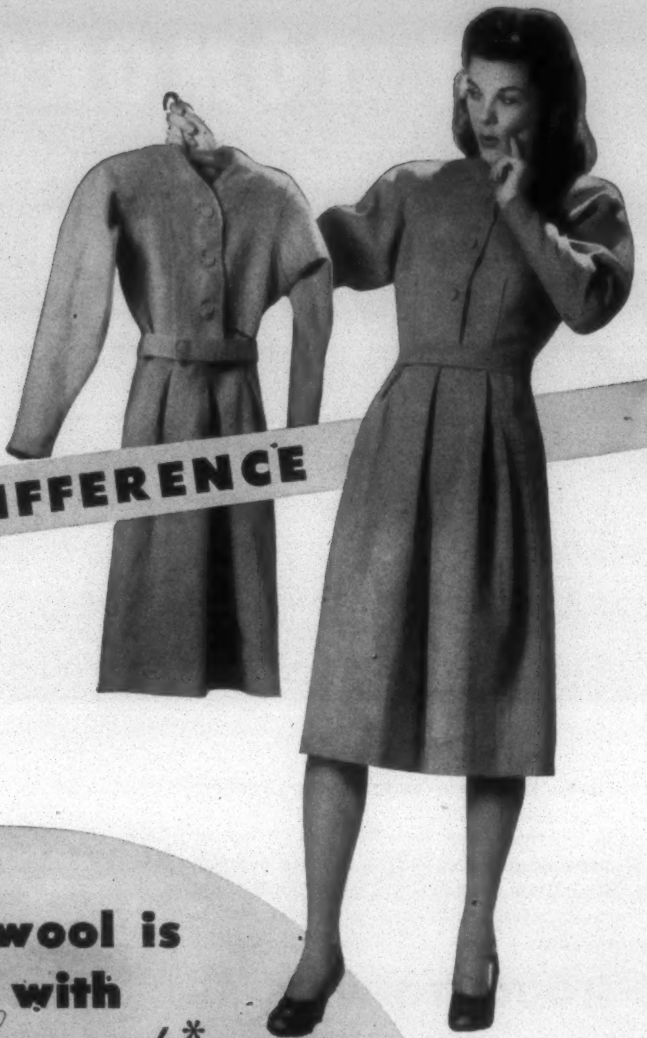
•

Those are typical of the developments being perfected for tomorrow's textile processing—available today. Count on Houghton to keep in the lead; contact the Houghton Man for details and service on any of these items applicable to your processes. E. F. HOUGHTON & CO., Philadelphia and Charlotte.

Houghton Products

FOR THE TEXTILE INDUSTRY

NOTE THE DIFFERENCE



when wool is treated with *Lanaset** resin

When your advance fabric plans include LANASET* Melamine Resin, you will profit by your customers' enthusiasm for washable woolens. The fabric of the suit shown on the hanger is exactly the same as that of the identical suit worn by the young lady in the photograph *except* that the one she is wearing has been treated with LANASET Resin. Note the difference after the same number of washings.

Planned right into the development of your woven and knitted fabrics, LANASET Resin controls shrinkage and felting. Desirable qualities of the wool are maintained. Merchandise processed with LANASET Resin has been promoted by leading stores throughout the country, and identified with the LANASET Resin tag.

Investigate LANASET Resin today and assure satisfactory sales for your wool merchandise. Our technical staff is at your disposal to help in planning new woolens for best results in coordinating fabric and finish.

Our Textile Finishing Bulletin No. 112 "Wool Shrinkage Control with LANASET Resin" is available on request.

Lanaset Resin
FOR WOOL SHRINKAGE CONTROL

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TEXTILE RESIN DEPARTMENT
BOUND BROOK, NEW JERSEY
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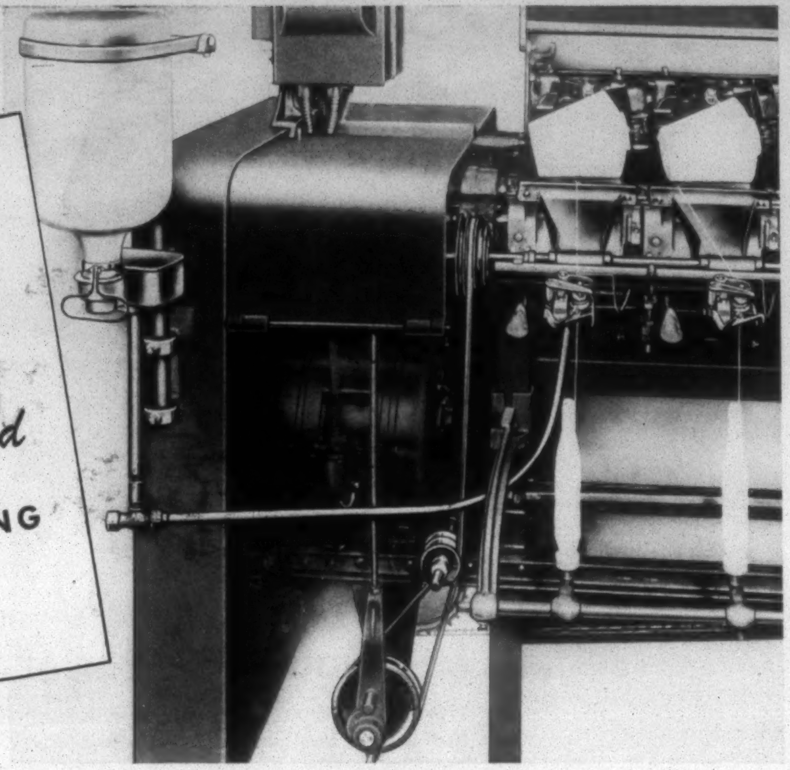


FOSTER

MODEL 102

It may be equipped with CONDITIONING ATTACHMENT

OTHER FEATURES

1. Machine is equally suitable for winding cotton, wool, worsted, merino, mercerized, spun silk or spun rayon yarns. It is designed and built to resist the cutting action of hard worsted yarns. No expensive replacements are required.

2. It will produce 9 different angles of wind from 9° to 18°. Important if you radically change your count or type of yarn.

3. It will wind package dyed yarn, even if damp in the center of the package. No jumping out of guides.

4. Changeovers from cones to tubes, or vice-versa, are comparatively inexpensive.

5. One side can wind cones and the other tubes, if desired.

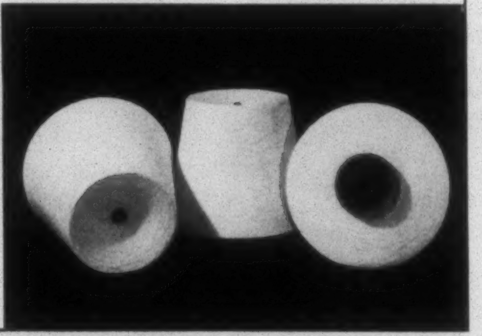
Bulletin A-95 on request.

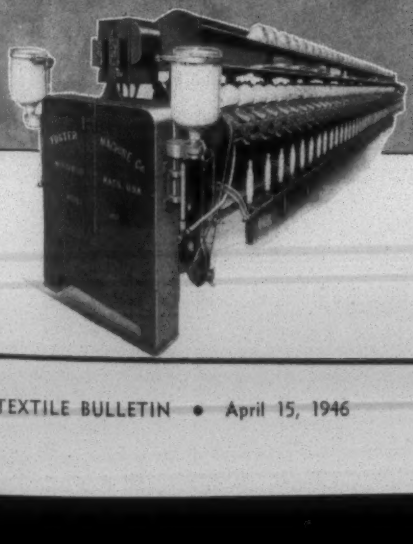
The yarn, drawing from bobbin or package, passes through the tension and slubbing device after which it contacts the conditioning roll, which is partly immersed in the emulsion. The roll can be run at three speeds in the direction of the yarn travel and at three speeds in the opposite direction, thus providing varied percentage of emulsion pickup. This pickup can be further varied by raising or lowering the level of the liquid in the tanks, which is accomplished by adjusting the bottle up or down.

This is only one of many flexibility and economy features which makes the Foster Model 102 the winder of today AND TOMORROW.

KNITTERS —— Specify FOSTER —the *ORIGINAL* Open Wind Cone

By so doing you can get CONDITIONED yarn if you so desire, and can also specify the taper, angle of wind and cone density. Modern slub catching attachments and other special devices on the Foster Model 102 assure a clean, uniformly high quality yarn and cones that are free of ribbon wind.





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The larger the volume of dye liquor moved through a package of yarn and the lower the pressure developed . . . the faster and more uniform are the dyeing results! This entirely new principle in package dyeing was first introduced in the SMITH-DRUM Package Dyeing Machine just a few years ago. And it has completely revolutionized package dyeing.

A new type of package carrier and a new fluted spindle design permit a far greater flow of liquor through each package than the conventional types of machines. This increases the speed of dyeing and results in greater uniformity.

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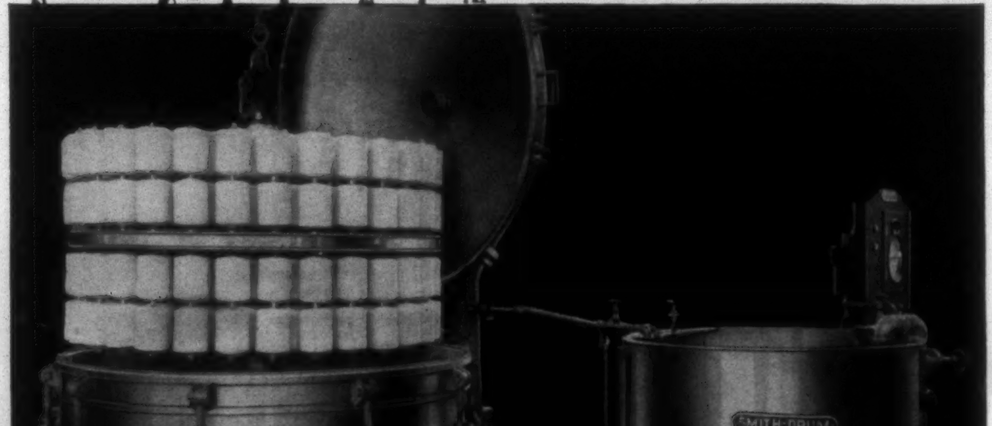

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SMITH-DRUM. PROCESSING MACHINERY

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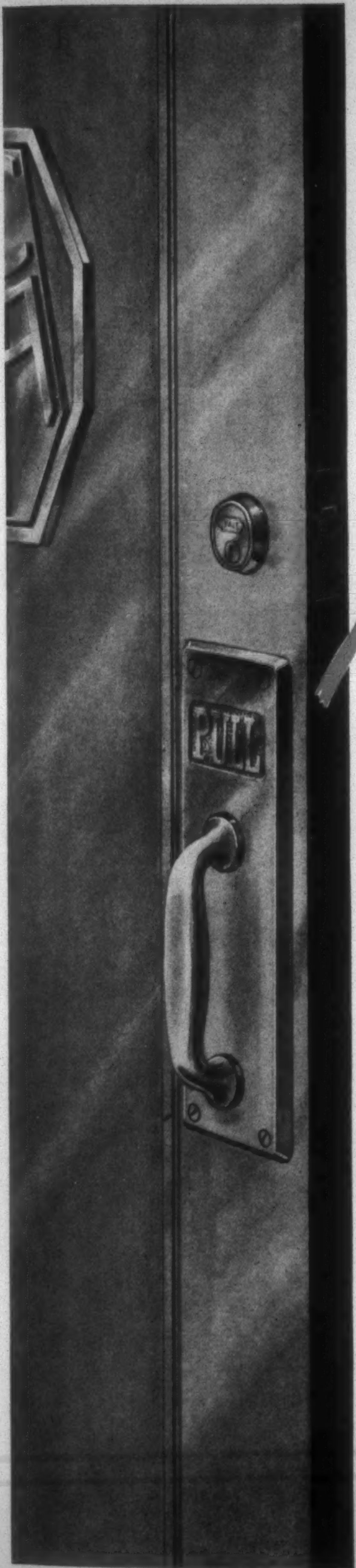

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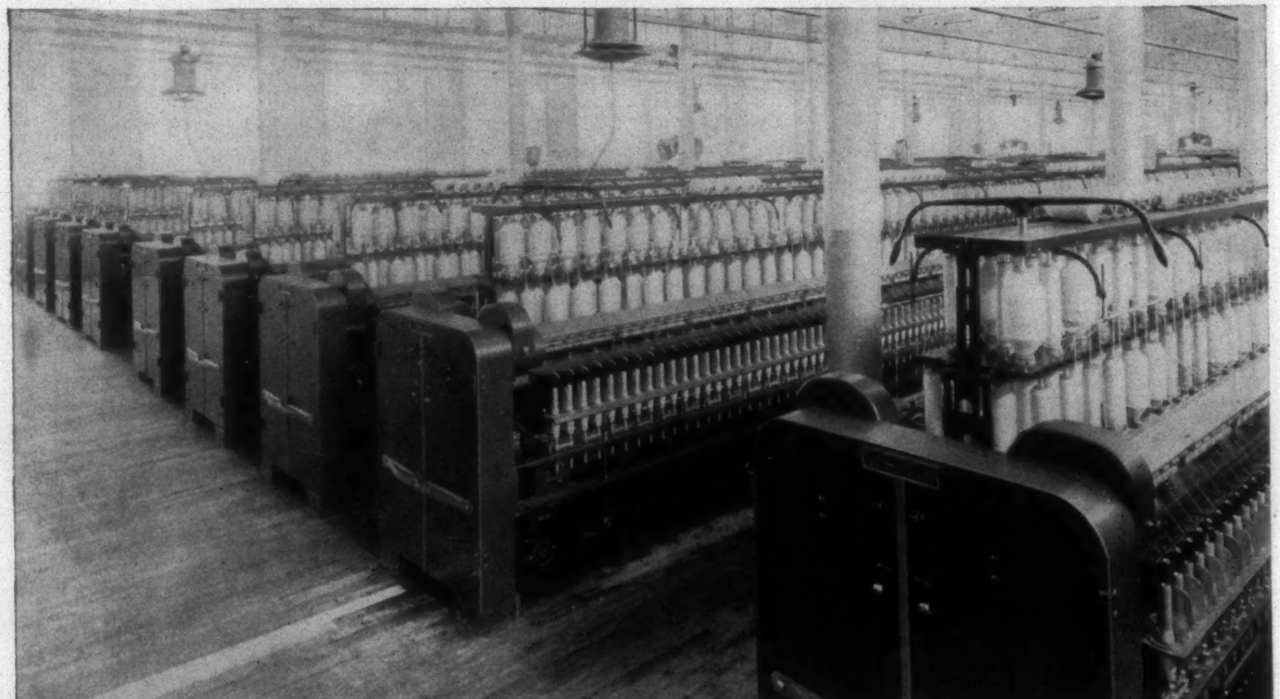
VAT DYES OF THE DOW CHEMICAL COMPANY

KEEP DOWN

YARN SPOILAGE
THREAD BREAKAGE
with

SINCLAIR NO-DRIP LUBRICANTS



IS YOUR PROBLEM uneven draft on spinning operations with attendant low and irregular yarn breaking strength? Improper saddle and roll neck lubrication may be the cause.

Correct saddle and roll neck lubrication calls for a lubricant that flows evenly through the saddle bore and minimizes roll neck friction. At the same time, it must not creep onto roll cots or drip on bottom roll. Sinclair NO-DRIP LUBRICANTS have the correct combination of properties to provide this desired performance.

NO-DRIPS—in five different grades—possess built-in properties to resist creeping. They make for *clean, smooth* top roll lubrication.

Keep down irregular drafting and costly spoilage with Sinclair NO-DRIP LUBRICANTS.

SINCLAIR TEXTILE LUBRICANTS

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textile bulletin

Vol. 70 April 15, 1946 No. 4

WORLD TRADE AND THE TECHNOLOGIST

Address by **HERBERT J. WOLLNER** before American Association of Textile Technologists
Announcing Proposed International Standardization of Textile Testing Methods

WHEN the setting up of standards is constructively approached and when they are set up on such a basis as to provide true solutions to existing trade problems, the resulting international standards cannot but help to reduce trade frictions between countries. I should like to draw your attention to the renewed impulse which both industries and governments are giving and the steps which they are taking to facilitate international agreement with respect to standards in manufactured goods and raw materials. Historically this is timely and interesting.

Trade between nations in the earliest days was largely the trade in agricultural products and in raw materials, dug from the earth or hewn from forests. Quality concepts and recognition of similar values were not too strong, nor was it necessary that they should be. Materials of production were cheap and plentiful and the needs to which they were put were largely non-discriminating. If there was an element of freebooting in this trade of a century ago, we can put it down as being characteristic of growing industry and growing business throughout the world. Shall we ascribe it to adolescence and growing pains? Today, international trade conditions, however, are quite different. We hear talk about balanced trade far more than we did years ago. We are impressed with the fact that trade in its balanced state redounds to the good of the entire world community—and underlying all this we recognize the increasingly important place that manufactured goods take in this trade. Whereas years ago the tendency was for the larger nations merely to draw on the raw material cources of those countries which were relatively undeveloped and located in far-away places, today we look for equity in trade. Yes! If there was an element of freebooting involved in yesterday's international trading, we can assign it to the adolescent state of the world at the time—adolescent at least with respect to its becoming a completely industrialized world. Today, however, the impulse is upon exchange—exchange of goods, and exchange of raw materials between countries, communities, sections, each of which has something to offer in terms of physical wares which the other country wants. Now, this kind of a trade to be successful requires a mutual understanding of the other fellow's wants and needs and a mutual desire to adequately satisfy those wants and finally the ability to do so. Both knowledge and understanding leading to agreements are needed.

Can you deal, can you trade with a man who does not understand you? Will he appreciate, if he is not able to understand you, what is required for him to do to satisfy your wants. Will he recognize the degree to which he has to refine his processes, and so to speak, hew to the line in manufacturing, in assembling, in providing you with those physical things which you are entering the world market place to purchase? Or would you on the other hand prefer to deal in a world where competent understanding with respect to the basic requirements of manufacturing processes obtains and where the critical tolerances, details, dimensions and compositions which are involved in a smooth-flowing industry are understood by everyone concerned.

A supplier separated by thousands of miles from a purchaser can only then make "good delivery" when both agree upon the methods by which his products will be examined and tested, and the standards against which they will be compared. I know, of course, that this is all very elementary to you.

Controlling Markets

There are however, further angles to this business of international standardization which transcend the mere capacity for someone to make "good delivery" of exportable goods. Let me refer to a small item which appeared in the United States Department of Commerce publication, *Foreign Commerce Weekly,* some months ago. It is a typical little item but full of implied background and suggestion. It related to an inquiry from two South American countries looking for an American manufacturer capable of supplying lamps previously made by Germany and Japan. Dotted over these two South American countries in offices, factories and homes are electric light fixtures today which American lamp bases will not fit. Interesting story . . . Germany before the war sold electric light fixtures in South America which German lamps would fit, but American lamps wouldn't. On the other hand, German lamps would fit American type sockets, a mere matter of dimension and design, but very, very clever as you will readily admit.

It isn't always necessary to control a world market through treaties. Treaties can be broken, can be torn up, but a lamp socket, if it is going to be ripped out of the wall, requires a lot of expenditure of time and money and is not quite as simple as tearing up a piece of paper. How very effective in garnering and controlling a market for lamps is the method the Germans attempted to employ in the device which they developed. But how very expensive in terms of a peaceful world trade. Countless examples of a similar kind can, I suppose, be cited. All were directed toward capturing world markets, shall we say in perpetuity—in a manner which had nothing to do with the quality of merchandise delivered, or the equities which were involved in each particular instance.

And again there are these customs barriers. The customs courts are frequently asked to rule upon questions of definitions where a manufacturer in a foreign port on order by an importer here in America, shipped merchandise under the impression that it fell within certain tariff clauses or paragraphs because that is the way that paragraph is interpreted, in this far away place. The merchandise arrives here, the word usage is far different from what it is abroad, and lo and behold whereas it's one thing in Europe, or one thing in Egypt, or one thing in Australia, or one thing in the Argentine, it's quite another thing here. Who is right? Well, everyone is right, of course, and universal understanding of what these words mean which are written into tariff and customs acts of the world, would be the only basis upon which this kind of continuous litigation could be avoided. It is litigation of this type which frustrates trade. It is this type of thing, this type of universal lack of agreement which the United Nations Standards Co-ordinating Committee is set up to correct.

After the last war, in the middle 20s, there was formed, with headquarters in Switzerland, an international association for the purpose of facilitating the setting up of international standards. It was largely under the aegis of technical men, and such industrial interest as was behind it was spotty. As a matter of fact the two large world trade nations, Great Britain and America, were not overly energetic insofar as their respective commercial interests were concerned. Not so, however, the central European powers. They early displayed a keen interest and quickly let their influence be felt.

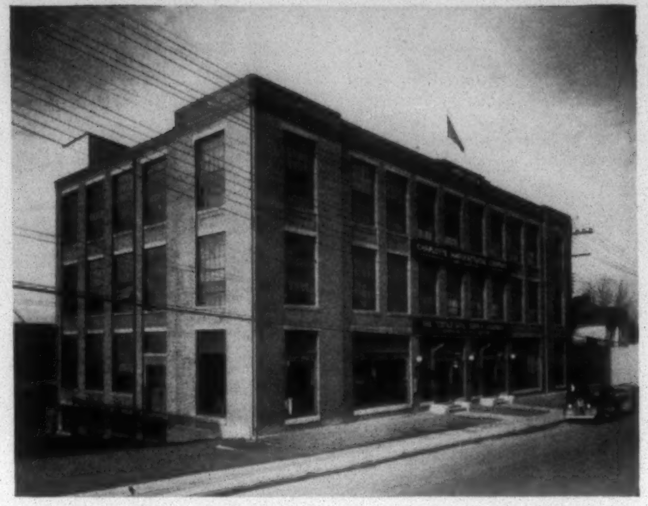
Waiting for the time when natural rubber becomes more plentiful, the chemical products division of Goodyear Rubber Co. is ready to go into production on a new Pliofilm fabric, which is described as waterproof, scarproof and so tough it can't be scratched with a knife. Shown above is experimental matched luggage, purse, shoes, garment bag and upholstered chair featuring the use of this new fabric.

There seems to be a general tendency at the present to believe that the Fascist countries attempted to employ the International Standards Association as a tool to further their agressive interests. The impression obtains that in the absence of strong counter influence by America and Great Britain, Italy and Germany did succeed in holding great sway in this organization. With the coming on of the recent war it was, of course, necessary for the International Standards Association to be put, shall we say, quasi in the state of suspense. Its activities and functions were taken over by neutral Switzerland, which attempted during the period of the war to maintain its pulse, albeit, shall we say in quiescent state.

During the war—specifically in 1943, Great Britain, the United States and Canada were confronted with simple problems of unifying their military production. Lack of uniformity in the myriad minor details of dimension and composition, imposed difficulties in co-ordinating manufacturing, the cost of which has variously been estimated in the hundreds of millions of dollars. To meet this emergency, it was decided to set up a temporary committee. Thus the United Nations Standards Co-ordinating Committee came into being. It opened its offices in June, 1944. Its primary function at that particular time was to facilitate the prosecution of the war in providing an agency by means of which matters of standards could be adequately and expeditiously handled, standards insofar as they affected the war. It was, of course, at that time also recognized that such a committee might undertake to facilitate the transition in the immediate post-war period, and through an understanding of the nature of the problems involved to provide a springboard by means of which future steps toward international standards could be taken. This committee was not limited to the three organizing powers, but its facilities for collaboration were immediately extended to all the United Nations. A large number of countries signatory to the United Nations agreement indicated the desire to collaborate, and international standardization as an adjunct to the war effort came into vital and active being. It was recognized early that this newly created committee could only be considered a strictly temporary body and that when the war was over the groundwork would have to be laid for a permanent and adequate international organization.

International standardization is now obviously coming of age. It is recognized, no longer, as the "ivory tower" creation of scientists and technical men completely divorced from any needs of reality. It is now recognized as a necessary tool of trade, manufacture, business. To date the following 17 countries, through their national standards bodies, have joined the committee: Australia, Belgium, Brazil, Canada, Chile, China, Czechoslovakia, Denmark, France, Great Britain, Mexico, Netherlands, New Zealand, Norway, Poland, South Africa and the United States.

At a meeting in New York, Oct. 8-11, 1945, the United Nations Standards Co-ordinating Committee took the first steps in setting up a permanent international standards organization. In taking these steps it has been the view of the committee that in the post-war world the international aspects of standards are going to be of far greater importance than formerly, and that accordingly the permanent institution must be more strongly organized and more amply financed and staffed than was the old International Federation of the National Standardizing Association. This



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preliminary work has included preparations for a world-wide conference of the national standards bodies to be held in London to consumate the formation of the permanent organization. The work of the October conference also included the drafting of a proposed constitution to be submitted to the London conference for final action; the formulation of recommendations in regard to various matters necessary to the setting up of a permanent organization; and discussions with existing international bodies concerned with standards. It is proposed that the new body shall be called "International Standards Co-ordinating Association."

Maybe we'd better again review the picture. Anytime you enter into a compact for the purpose of setting up a standard, you lose something. You lose something which hitherto you may possibly have considered important. You lose purposely, willfully, and with forethought in order to get something which you consider more important than the thing which you are about to give up. It's just like trading; in trading you give up and you get. The thing you give up you need less than the thing you get. The other fellow gives up something which he believes he needs less than the thing he is going to get. This applies to standardization, whether it is on a national level or on international level.

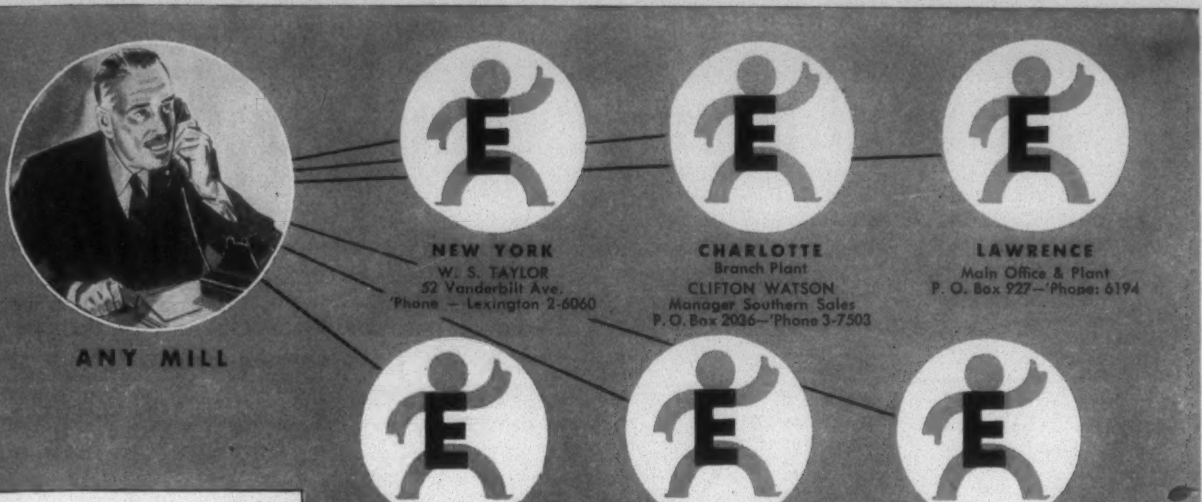
Development of individuality, be it in character of personality or of product, can and usually does result in distinction. Yet all distinction, except it be based upon real superior quality—is not worthy of the effort—some definitely unworthy. When being different from others in your community causes you to lead an unsuccessful life, then your distinction is a hardship and a loss to you. Similarly if manufacturing some oddly dimensioned, or compounded product causes you to lose your market, then this distinction should be traded in for a more acceptable, shall we say, a standard model.

Seated on the bale of cotton is Effie Senn Mason of Gastonia, N. C., who will reign as Queen of the Royal Court of Cotton in the Fifth Annual Cotton Festival to be staged in the combed yarn center June 17-21. Inset shows R. Dave Hall, prominent textile executive of Belmont, N. C., who will officiate as King of the Cotton Court. The festival is being resumed this year for the first time since June, 1941.

I have now the unique pleasure of an announcement. The United Nations Standards Co-ordinating Committee has been advised by the American Standards Association that it, on behalf of its entire membership, is proposing to the world at large that methods for testing textiles be standardized on an international level, and specifically it is presenting some 94 at-present-existing American standard procedures and proposing them for international discussion, consideration, modification where called for, and apparently they trust, for adoption. Now, you know this is quite interesting. The United States today enjoys a very preeminent position in the world affairs, especially with respect to textiles. The standards to which its level of living has compelled manufacturers to produce their wares, have been so high, and getting higher each succeeding year, that they have been broadly recognized as desirable levels from utility and other points of view. The program which the American Standards Association now presents, and which I have the privilege of making this first announcement on, is extensive and certainly is the largest proposed project yet submitted.

These methods, these 94 separate and distinct methods which in one way or another through these past years have been the results of your efforts and commanded your respect, are now being presented for the first time and laid upon an international green bais table and offered for consideration to provide a common language in the interests of a healthy and enhanced international trade. When one considers the universal character of textiles and the fact that they are constructed to satisfy fundamental human needs, it is rather surprising that no far-reaching international agreement on test methods have so far been developed. Textiles are a major item in international trade.

The world is now entering upon a new era and especially is this true of textiles and their manufacture. New synthetic fibers are continually being announced. New methods for processing the older natural fibers are being continually developed. The control of the quality of output which will obtain in future textile manufacturing, will by comparison of past and present controls seem crude. It stands to reason that if a manufacturer and exporter in one country, selling his fabrics in many parts of the world, will have to subject his product to test methods differing from place to place, he will run up against a very severe technological barrier, and that my friends, is where standards — and the technologists come in. Accordance and agreement on methods of establishing good delivery in shipments of textiles, appear obviously desirable and essential to free, smooth-flowing, streamlined trade. In setting up international standards with respect to textile test methods, there was no implication of setting up standards of quality. Indeed, it would appear from the technical advances that have been announced that the future world buyer of textiles will have a complete and almost unlimited range of qualities from which to choose. Qualities of character built into fabric will presumably be under such specific control that the buyer will be able to choose that particular combination that precisely suits his needs and the needs of his community. To be able to obtain satisfactory delivery after his precise specifications have once been set, universal agreement on a method for test must have previously been developed.



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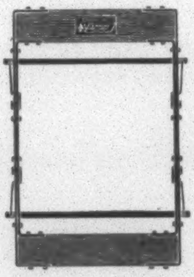

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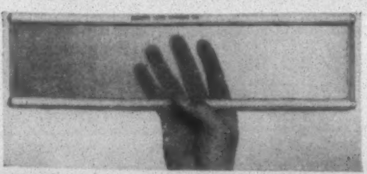

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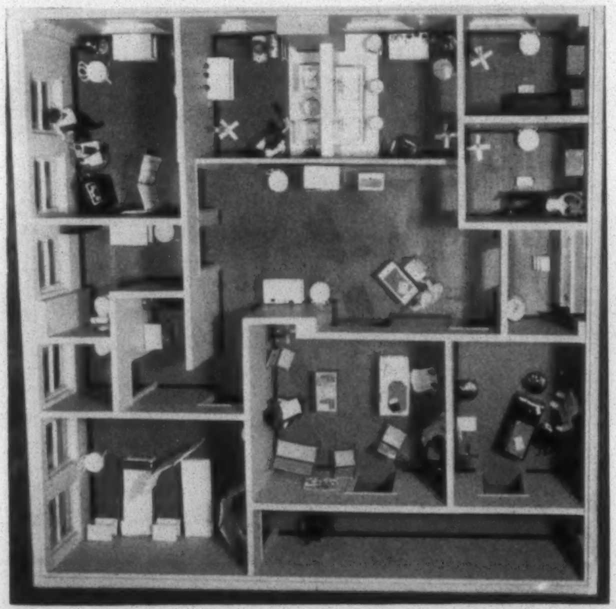
A Model Industrial Medical Department

A MINIATURE plant hospital designed and built by American Mutual Liability Insurance Co. of Boston, Mass., was a featured exhibit at the annual meeting of the American Association of Industrial Nurses held this month at Chicago, Ill. The model industrial medical department is built exactly to scale, including complete furniture and equipment, and includes such minute details as tiny medical instruments. A number of life-like puppets less than six inches high are made to resemble doctors, nurses, and patients.

The purpose of the exhibit is to visualize plans for an ideal medical department for factories and industries, which was developed after careful studies by American Mutual technicians, and based on the composite experience of many engineers, architects, physicians and nurses associated with industry. The medical dispensary plans basically, are designed to accommodate a plant payroll of 1,500 employees, where it is assumed that from 45 to 90 workers with occupational and non-occupational illnesses will be treated daily in an eight-hour period. Provision is made in the exhibit plan for a waiting room, doctor's office, nurses room, nurses work area, a two-bed ward, two examining rooms, two treatment rooms, a supply room and a physiotherapy room.

This model medical department is presented as practical and effective for a plant employing about 1,500 people. The design is a composite of the experience of a number of industrial physicians and nurses. Many factors of importance to management such as cost, availability of space and building ordinances were considered in its planning. It is not intended to represent the perfect plan as conditions in industry vary greatly and influence the requirements of the medical department. However, the model may be used as a guide for the designing of larger or smaller units according to the needs of the particular industry.



The promotion of better health in the plant and the preservation of the working skills of men and women in industry depend upon efficient medical and nursing care. It is one of the cornerstones upon which harmonious relations are built. To assist industrial management in providing this better medical care for workers, the model plant hospital shown above has been developed by the American Association of Industrial Nurses in collaboration with American Mutual Liability Insurance Co.

The percentage of workers daily visiting a plant dispensary varies greatly but it is assumed that in a plant of 1,500 employees anywhere from 45 to 90 (three to six per cent of plant population) workers with occupational and emergency non-occupational illnesses will be treated in an eight-hour period. Although not primarily intended for that purpose, the department should also be adequate for a preplacement and periodic examination program. It is assumed that such a program would not require more than ten physical examinations daily. The average hourly census in a department of this size would therefore be about nine and would rarely exceed twelve.

The medical department is designed to occupy approximately 1,600 square feet in a corner of a typical industrial building. It should preferably be located on the ground floor in the place most convenient for the use of injured workers. In some instances, it may advantageously be located near the personnel office. Water and toilet facilities have been placed in those locations where plumbing, soil and vent lines as well as water supply may be readily installed in buildings of this type. Hot and cold water must be provided for the dispensary. Entrance to the department is through a corridor in the building and there is no entrance directly from the outside.

A staff consisting of a full-time doctor, two full-time nurses and a clerk would be necessary for adequate service in an active dispensary.

The worker enters a waiting room where he or she is interviewed by a secretary at a far corner. A patient who is waiting cannot see treatment being administered to any person. Although the waiting room is inside and without a window, it can be made attractive. Waiting periods should be curtailed, as the medical department must make every attempt to get the worker back on the job as soon as possible.

The general dispensary is spacious and contains all essential equipment for first aid. Glass partitions divide this area into three smaller rooms, providing a nurse's sub-dressing room and two rooms for treatments and hand and foot baths. Since many injuries are to the hands, treatment and re-dressings can be done without embarrassment to the patient. Privacy is obtained without sacrificing efficiency b glass partitions extending out from the central washing units. The sub-dressing room permits the nurse to interview patients privately. A Snellen chart may be placed in this room for vision testing. Essential equipment for the dispensary consists of a sterilizer, autoclave, two hand baths, one foot bath, a waste sink, besides the usual surgical equipment and instruments.

Two examining rooms are provided for physical examinations, minor surgical operations and special treatments. Each

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of these rooms should be furnished with all essential equipment so that they can be used interchangeably. One of the rooms may be equipped with special instruments such as may be necessary for the treatment of eye injuries.

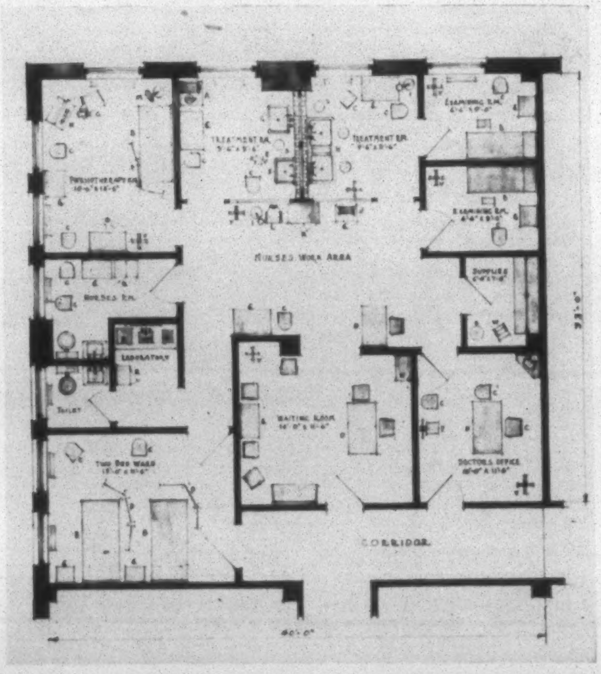
A separate room is designated for physiotherapy since these treatments usually require a relatively long time. Recommended equipment includes a diathermy machine and infra-red lamps. Baking machines are also desirable pieces of equipment.

The laboratory is small, since relatively few laboratory procedures are performed in an industrial medical department. If an extensive program of periodic examinations is planned, a larger laboratory may be necessary. Equipment and materials to perform a routine urine analysis and blood count, as well as a small refrigerator, is the minimum required.

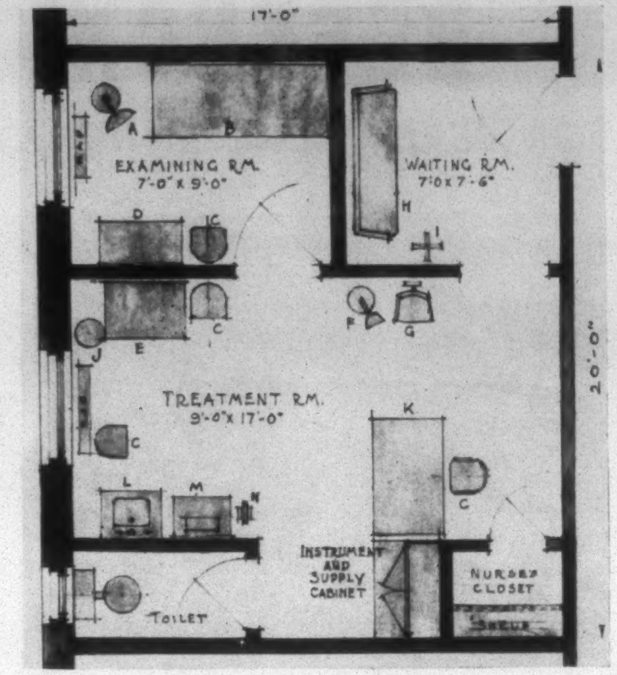
A room of moderate size is provided for the doctor. This room should be soundproof and equipped with a desk, chair and instruments for consultations and minor examinations. A fairly large room is provided as a rest room for workers indisposed for a few hours and who are able to return to work the same day. This room may be entered from the corridor and closed off from the remainder of the dispensary. This feature will be found invaluable in cases of severe injury or sudden death in the plant, since workers may be taken to this room, given first aid and removed to the hospital without disturbing the rest of the clinic.

Other features of the clinic are a nurse's rest room and a supply room of ample proportions. Toilet facilities are provided for both clinic personnel and patients.

It should be pointed out that the following features are of special interest: (1) a separate two-bed room, which may be entered from the corridor and permits care of serious emergencies without disturbing the medical department; (2) a large, efficient dispensary which has the added desirable feature of privacy; (3) a special room for physiotherapy; (4) examining rooms where preplacement examinations, special treatment and minor operations may be performed; (5) a separate room for the nurses and clerk; (6) separate lavatories for personnel and patients; and (7) adequate space for storage of supplies.



The model plant hospital detailed in architect's drawing: Key: A—autoclave; B—bed; C—chair; D—desk; E—foot rest; F—foot tub; G—slop sink; H—soak sink; I—goose-neck lamp; J—instrument sterilizer; K—instrument cabinet; L—treatment chair; M—infra red lamp (Physio. RM); M—microscope (lab.); N—diathermy machine; O—cabinet; P—folding screen; Q—lockers; R—centrifuge; R—refrigerator; S—waste can; V—costumer; W—stepladder; X—laundry basket; Y—scale; Z—file; &—table.



The small plant dispensary. Key: A—infra red lamp; B—bed; C—chair; D—18 by 24-inch table; E—work table; F—goose-neck lamp; G—treatment chair; H—settee; I—costumer; J—waste can; K—nurses desk; L—lavatory; M—table and sterilizer; N—foot rest.

The Small Plant Dispensary

The small plant dispensary (see illustration) is designed for industries employing less than 500 people and in charge of a part-time physician and a full-time nurse. The essential features of an effective first aid room are embodied in this layout. These features consist of a waiting room, treatment room, rest room, lavatory and storage space. Arrangement of the various units will depend on local factors.

The area required is about 350 square feet, but this can be contracted or expanded according to the particular needs. The space is divided into three separate units. The waiting room is small but will rarely have to accommodate more than three or four people and is so arranged that waiting patients cannot see into the treatment room.

The treatment room occupies most of the floor area and contains a desk for the nurse and doctor, lavatory, hand and foot baths, sterilizer, dressing table and other equipment. A rest room with a table and bed may be used interchangeable for physiotherapy, physical examinations or other treatments requiring privacy. This room can also be used for workers indisposed for several hours during the work day.

Executive offices of the Philadelphia Textile Institute Foundation have been opened in Rooms 1200-1201, Land Title Building, Broad and Chestnut Streets, Philadelphia, Pa. The enlarged activities of the foundation will be carried on at this new address under the direction of Emil R. Pohlers, executive director.

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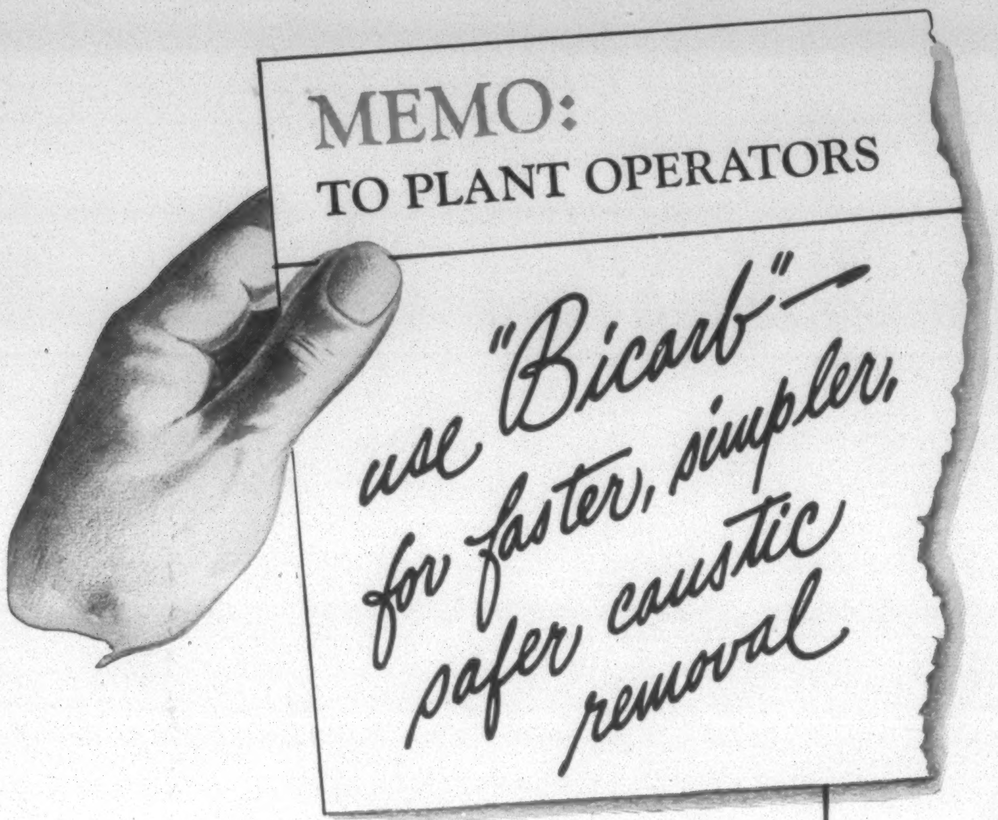

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While complete details for the utilization of this process have been evolved specifically for textiles, Mathieson Research is prepared to carry out further assignments in other fields.

For best results, consult our Technical Staff in regard to adapting this new Mathieson development to your particular operations. Write for further information.

Wool Association Has 81st Convention

ARTHUR BESSE was re-elected president of the National Association of Wool Manufacturers at the 81st annual meeting of the association April 9 at Hotel Commodore, New York City. Vice-presidents Franklin W. Hobbs and Moses Pendleton and Secretary-Treasurer Walter Humphreys also were continued in office. Newly elected vice-presidents were Millard D. Brown, Lewis A. Hird and John L. Hutcheson. Among the newly-elected directors were Roger Milliken of Deering Milliken & Co., and Harold J. Walter of Uxbridge Worsted Mills. Robert C. Atherholt of Hampton Looms of Virginia, James F. Diephus of Pacific Mills, and Thomas Sheehe of Chatham Mfg. Co. are among those directors whose terms continue.

More than 375 association members convened at the morning business session, opening the day's activities. Mr. Besse at that session gave his annual report, in which he warned the trade on the comming effects of a possible reduction in the protective tariff rate. Pending legislation in emergency price control, proposed investigation of claims that textile machinery is being shipped out of the country, C.P.A. interpretation of Amendment No. 4, and the tariff were topics which came up for consideration.

J. Byron Wilson of the National Association of Wool Growers legislative committee was a guest speaker at the luncheon, after which Saul Sells, assistant director of the Office of Price Administration's consumer goods price division, conducted a questions-and-answers program with himself as "target." Among those who participated in the discussion were Mr. Besse, the "spark plug," Ames Stevens, Kenneth Marriner, Edward Robertson, Val Gottschlinger, Charles Craig, Alfred C. Gaunt, George Riley and others.

Mr. Sells explained the type of reasoning employed in the setting up of the regulations and most of the session was devoted to a discussion of the desirability of considering cases which provided problematical cases, individually, rather than on the present basis. He told the wool men that O.P.A. is now conducting a survey of the wool textile industry, the results of which are expected to disclose the need for a price adjustment on individual fabrics without taking into accounts the mill's profits in comparison with the base period.

The gist of Mr. Wilson's comments was a discussion of the tariff situation, dealing with which, Mr. Wilson said frankly, involved an approach which to him was still problematical. He began by humorously referring to the type of co-operation the wool textile industry effected, because he said it "not only consumed the wool that was the product of his associates, but provided lamb and mutton at their official luncheons."

Anent the lowering of the tariff, Mr. Besse said that "We must understand that it is the administration's program to encourage imports, not because we need great imports, but because of the pressure of exporting industries for larger sales abroad and because of the acceptance in academic cloisters of the concept of free trade. We are faced with a fight for our very existence. The American wool textile industry is, on the basis of output per man hour, more efficient than that of any other country. . . . And the American wool textile industry cannot afford to miss any possible opportunity to tell its story in order to prevent being secrificed for a purposeless foreign trade whose value is measured only in terms of meaningless, but colossal figures of volume."

The American public during 1946 will be provided with more yards of woolens and worsteds than have ever been produced in this country in any peacetime year, the American Wool Council has reported as a result of a survey of current production and military and foreign requirements. Production at present is running at the rate of 425 million yards and this volume gives promise of increasing as labor conditions improve, the council stated. Distortions in production and distribution forced on the industry by the M.A.P. were cited as being largely responsible for the shortage in men's clothing. Elimination of M.A.P., according to mill executives who were queried, would result in increasing production of men's wear fabrics many millions of yards.

Neither the Army nor the Navy will be in the market for any quantity of worsteds or woolens during 1946, the council reported. However, the U. S. Department of Agriculture anticipates that the American woolen and worsted industry will use between 800 million and 900 million pounds of wool for civilian apparel fabrics in 1946. The council report concludes that "over and above the high rate of demand, is the unanimous declarations of textile manufacturers that the traditional pattern of production and distribution, built up over generations of meeting the public's needs in ratio of total production, has been forcibly destroyed. Woolen and worsted manufacturers must today make fabrics which will permit them to meet increased costs of labor and materials rather than what the market most urgently needs."

Pointing out the cause for this situation, the council report continues, "Only a buyers market, such as exists today permits this type of operation," and advancing a curative measure, "Only a change in present O.P.A. restrictions that will permit textile manufacturers to revert to their traditional pattern of production, based fundamentally on the needs of the public, will relieve existing drastic shortages in types and qualities of essential fabrics."

Celanese To Increase Staple Fiber Output

The expansion policy of Celanese Corp. of America calls for raising staple fiber production to three times its present level, W. McM. Cameron, first vice-chairman, informed stockholders at their annual meeting recently. The current $40,000,000 expansion program also will increase production at existing plants and extend new facilities at Bridgewater, Va., Summit and Belvedere, N. J., and Rock Hill, S. C.

PROCESSING RAYON STAPLE

—As Explained to the South Carolina Division, Southern Textile Association—

By L. L. COBB, Tennessee Eastman Corp.

DURING the early 1930s, many textile men thought that the future of spun rayons would be on the wool system, that is, the French and Bradford systems of yarn manufacture. The French and Bradford worsted systems require many processes to reduce a tangled mass of fibers into a commercial yarn. We have found that a higher grade yarn can be produced on the cotton system at a lower cost. The cotton mills are the largest consumers of synthetic staples and it is thought that they will continue to be the leaders in this rapidly expanding field.

There are no difficult problems in processing rayon staple on the cotton system if the yarns being spun are in reasonable limitations. Mills which have changed over to rayon from cotton agree that they prefer to process rayon instead of cotton. Rayon staple comes to your mill in neat bales, they are easy to handle, and easy to stack in your warehouse. The processing qualities are more uniform than cotton. The mill and the machines are easier to keep clean and your help is more satisfied.

As some are not familiar with rayon terms concerning fiber size I will attempt to clear up this point. Rayon is a versatile fiber, it is made in many sizes and in any commercial length. The size or fineness of synthetic fibers is usually expressed in denier per filament. The 1.5 denier rayon staple is approximately as fine as a good upland Carolina cotton. The 3.0 denier staple fiber is approximately twice the size of Carolina cotton. The 5.0 denier rayon staple fiber is still coarser, etc. Synthetic fibers of various deniers are used in yarns and fabrics on the regular cotton system. The 1.5 and the 3.0 denier fibers are the most commonly used at the present time. The finer fibers or filaments, such as 1.0 denier and 1.25 denier viscose and 1.5 denier acetate, have a very definite place in the market and their use is increasing; 5.0, 8.0 and 12 denier acetate fibers are widely used where or when bulk is desired without harshness.

Your mill must be governed by the limitations imposed by its equipment when planning the fiber size and lengths to be used. Rayon fibers are treated by the producer with a very small amount of a lubricant or finish which controls static and assists in uniform drafting. The lubricant reduces fiber breakage and nep formation on the picker and cards, as well as aiding in the reduction of clearer waste and fly. Excessive and improper lubrication, however, will cause faulty carding, neppy and flaky webs, and lapping on the various drafting rolls. In addition to this, excessive lubrication will cause the licker-in and cylinder to load rapidly, making it necessary to strip very often.

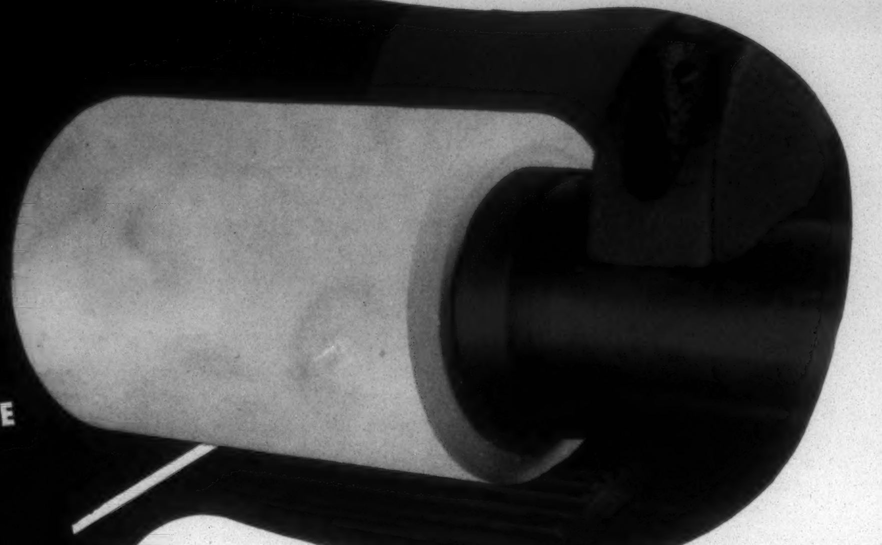
A high percentage of the yarn produced today is made from two-inch staple, because this length offers several advantages over the 1.5-inch. For a given yarn count, the two-inch staple yields a breaking strength approximately eight per cent higher than the 1.5-inch staple and in critical numbers the processing qualities are improved. The 2.5-inch staple gives only a slight increase in breaking strength over the two-inch because the fiber breakage during processing increases with the longer lengths. Two and a half inch fibers have an average length of 2.08 inches after carding, the two-inch averages 1.8 inches and the 1.5-inch averages 1.4 inches. The new count, too, increases as the staple length is increased.

Many of the cotton mills now processing rayon staple use two picking processes, two drawing processes, slubber, intermediate and use two ends up in spinning. However, there are also many mills using one picker process, two drawings, a slubber and spinning with two ends up. This regular cotton layout with a single picker process and one fly frame before spinning does not do as much blending. These short cuts make it essential to prepare a very uniform blend before picking.

Both acetate and viscose rayon staple fibers may be used alone or in blends with each other or with other fibers such as cotton, wool, casein fibers, silk or mohair. Blending is often used to obtain cross-dyed effects, as well as to change the fabric's physical character—that is, its hand, drape and crease-resisting properties. The wise choice of fiber types and sizes offers unlimited possibilities for yarn and fabric constructions. For all yarns and fibers which are to be cross-dyed, it is important to obtain blending of the different types of fibers of which the yarn is to be composed. If the blending is not uniform, filling bands and warp streakiness will appear in the finished fabric. Such fabrics can be saved only by dyeing them a solid shade. It is known that filling bands will appear in a 50-50 blend of acetate and viscose staple if the acetate content varies more than 1.5 per cent from bobbin to bobbin when woven on a single shuttle loom.

The greater number of blends are made before picking, and the old sandwich method is widely employed and is recommended. The blending and weighing are hand operations, and the employee should be carefully instructed to obtain accurate weighings and to break up the viscose lumps as the sandwich blend is being made. Example: A blend is to be 50 per cent 3.0 denier acetate and 50 per cent 3.0 denier viscose fibers. Fifty pounds of acetate fibers are carefully weighed out and spread on the floor of a bin at least 12 feet square. Fifty pounds of viscose fibers are then weighed out and spread evenly over the layer of acetate fibers. This is repeated until the desired total poundage is prepared. The operator then picks up a section of the blend, making an effort to get as many layers as possible of the sandwich blend in each armful. He then feeds it directly to the feeder hopper of the picker, or it can be tinted and blown into a storage bin for conditioning.

The operator making up the sandwich blend should be



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sure to break up the lumps or slabs of viscose before putting down a layer on the sandwich mix. This is important because acetate fibers open more rapidly than viscose fibers, and if the viscose is not freed from lumps, the spiked lifting aprons in the hoppers will take the acetate out faster than the viscose. Large lumps or slabs of viscose will ride up the apron and be knocked back by the knocker-off or stripper roll. As the acetate fibers are exhausted from the hopper, a surplus of viscose is built up, thus making an uneven blend in the lap, with the result that filling bands will appear in a cross-dyed fabric. If the blend is being tinted in the picker hopper, the viscose lumps will become too damp or wet from the tint spray. These wet or damp lumps will nep on the pickers and the card. If the viscose is well opened, these faults are eliminated.

Very little blending is carried out on the finisher-picker or in the drawing. Blending on the finisher picker is dangerous because laps often split and feed in double until the operator straightens out the lap. It is very difficult to eliminate spiraling if 100 per cent rayon slivers if different fibers are blended on the drawing process. The variation of card sliver weight usually averages 20 per cent. If a thin or light section of two or more slivers of one kind of fiber happens to feed in at the same time, subsequent doublings will not correct the error and filling bands will result.

Mechanical feeders are not sufficiently accurate to feed in small amounts of various fibers uniformly enough for yarns intended for cross-dyed fabrics. Mechanical blenders before picking are not widely used. Of course, if the yarn of 100 per cent acetate, viscose, or any other synthetic fiber is being processed, the blending operation can be ignored, except that it is best to open several bales at a time and feed the pickers from all the bales.

Reason for Tinting

The purpose of tinting rayon staple fiber is solely for the identification of spun rayon yarns in the weaving mills. The average mill will require four or five shades of color to identify its various blended or 100 per cent yarns. None of the natural undyed rayon staple need any additional finish or lubricant from the standpoint of performance in carding and spinning. This is true for blends and for 100 per cent yarns of either acetate or viscose. Only fugitive tints should be employed. Each plant should carefully test its tints to be sure that they can be readily scoured out and that they will not stain other fibers or yarns with which the tinted fibers are to be spun or woven. Some of the so-called fugitive tints are difficult to remove in finishing. Many of the rayon fugitive tints will dye or stain wool and protein fibers, and this should be kept in mind if wool casein fiber is present in the blend being tinted or in the fabric in which tinted yarns are woven. If the tinted yarns are to be subjected to any steaming or other setting process, the fugitivity of the tints after such a process should be tested.

TEMPLETON HEADS SOUTH CAROLINA S. T. A.

The new chairman of the South Carolina Division of the Southern Textile Association is J. B. Templeton, superintendent of the Poinsett Mill, Brandon Corp., Greenville. He was elected at the divisional meeting held at Parker High School in Greenville April 13, and succeeds John M. Caughman, general superintendent of Spartan Mills at Spartanburg. James B. Lybrand, assistant superintendent of Mills Mill at Greenville, was elected secretary of the division, and J. L. Adams, superintendent of Beaumont Mfg. Co. at Spartanburg, was named chairman of its carding and spinning section.

If the floor space is available, it is suggested that the sandwich blend be made and put into a feeder hopper, where it is spray-tinted, and then blown into a storage bin for conditioning. Even the best tinting systems tint or color only a small percentage of the fibers. The fibers which are exposed to the tint spray become excessively damp and will nep badly on the picker and the cards unless this excessive moisture is allowed to disperse.

If it is necessary to tint on the pickers, a spray system with an intermittent spray is recommended, because the fibers have time to change their position during the "off" part of the spray cycle and do not become too damp or wet. All tinting solutions should be very concentrated in order to reduce the moisture content of the tinted stock. There is no need to add more than 1½ pounds of the fugitive tinting solution to each lap of approximately 45 pounds. If more is added, it will be very difficult to eliminate neppy stock. Laps which are tinted on the picker will card better if they are allowed to condition at least ten hours before carding.

Minimum Handling Is Desirable

In processing rayon fibers, it is very desirable to keep the handling of the fibers at the minimum. Either single or two-process pickers may be employed, but it is suggested that the beats per inch be reduced to a total of 40 to 50. The Kirschner type beater is satisfactory, and it should have a feed roll clearance of at least one-fourth of an inch. Although no cleaning is necessary, the beater acts as an opener and fluffs the fibers. Bullet-nose pins are recommended. The grid bars should be covered to eliminate waste.

As all pickers vary, it may be necessary to experiment to determine the ideal fan speed. The majority of fibers should be drawn to the top cage, and split lap preventers should be used. The lap should be wrapped in heavy paper before it is removed from the picker. It is important, also, to doff lap as soon as it is completed, because if the full lap is allowed to continue to revolve the outside layers will be ruptured and will be likely to split when they begin to unwind on the finisher or on the card. The laps should be stored on racks—not on the floor. Rayons absorb dirt and oil verp rapidly, and it is important that they be kept clean. The paper wrapper should be removed until the lap is placed on the card. Excessive weight should not be used on the calender rolls, as the fibers are easily crushed. The pressure on the lap roll should be light, because excessive pressure causes the lap to bulge. Often the picker lap pin or roll is difficult to remove when doffing. If the pin is tapered, it will come out easily and the fibers will not be injured. Many plants use heavy cardboard tubes over the lap pins, which is satisfactory.

The average picker will produce a lap every six minutes, and the laps will be uniform in weight with very few rejects. An efficiency of 75 to 80 per cent is attainable, depending on the number of blends being processed. Lap weights up to 16 ounces per yard are practical, but the best results will be obtained with laps weighing approximately 13 ounces. The lighter weight laps allow less plucking under the feed roll. Uneven and lumpy laps will be jerked or plucked.

Most rayon staple being processed today is carded on the revolving flat card. Revolving flat card production of 12 to 14 pounds per hour can be expected for the 3.0 denier and coarser blends. If a blend contains more than 25 per cent of 1.5 denier acetate or viscose fibers, the card production should be lowered for clean carding. If 100 per cent, 1.25 or 1.0 denier viscose is being carded, the card production should not exceed six pounds per hour, because these finer fibers require more carding action. If the card is in good condition mechanically, standard settings will be satisfactory.

Suggested Settings (inches) for Revolving Flat Cards

Licker-in to cylinder	.010
Doffer to cylinder	.010
Flats to cylinder	.010
Feed plate to licker-in	.012
Cylinder screen, front	1/16 to ⅛
Cylinder screen, back	.020
Cylinder screen, middle	.030
Front top plate	.022
Front bottom plate	.029
Back top plate	.020
Back bottom plate	.029
Doffer comb	.029

The mote knives should be removed and a solid screen used beneath the licker-in. If the card clothing wire is 80s and 90s (80s on cylinder, 90s on flats), or 100s and 110s, the average blended or 100 per cent lap can be carded satisfactorily. The licker-in should be covered with No. 1 rayon wire. This type licker-in wire discourages loading and aids in the reduction of neps. Licker-in speeds can be maintained at 350 to 440 r.p.m. with satisfactory results.

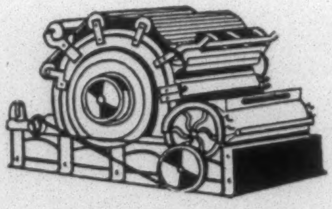
A flat card processing 12 to 14 pounds per hour should be stripped every four hours. Many mills run longer between stripping, but if the cylinder becomes loaded, the carding action is impaired and the fibers will be rolled. The card should be kept clean, because if fly and dust are allowed to accumulate around the feed rolls or on top of the doffer and licker-in cover, they are often blown or dropped into the stock being processed. The calender rolls on the card should be cleaned thoroughly and polished. The rolls in the coiler head also should be inspected. It may be necessary to increase the calender roll speed one or two teeth to maintain a taut web. Coiler heads are too often over-lubricated or under-lubricated. They should be properly lubricated, but excessive oil should not be used, as the rayon sliver will absorb the oil very rapidly and will cause lapping on the drawing and fly frames. This is a common occurrence which should be avoided. The flat speed should be reduced to approximately one flat per minute. The cylinder speed is maintained at approximately 165 r.p.m.

As the card production is increased, the quality falls off. It is quite possible that, in the future, card production may be increased to 20 to 25 pounds per hour on revolving flat cards, but this awaits the development of an opener unit which will deliver semi-carded stock.

Roller cards are being used to a limited extent to card coarse synthetic fibers for the cotton system. This type of card will not handle fine deniers satisfactorily, but it can handle coarse blends, such as 50 per cent 5.0 denier acetate and 50 per cent 3.0 denier viscose, provided the staple length is two inches or less. The longer staples, such as 2½-inch acetate or viscose, will nep badly on the roller card at high speeds. If the blend is all 5.0 denier, then 2½-inch staple will card satisfactorily, because the 5.0 denier, being a stronger and coarser fiber, has less tendency to break and nep. Production of 25 to 30 pounds per hour can be obtained. The very coarse fibers, such as 8.0 and 12 denier, will card satisfactorily in all lengths and at high speeds.

The average cotton drawing frame can handle 1½-inch staple at normal speeds of 85 to 110 feet per minute. If longer fibers are to be processed, the third roll from the front can be removed, or new stands can be obtained. Many types of synthetic and leather top rolls are being used, but there is a very definite trend toward metallic rolls. Leather rolls require varnishing and are easily scuffed unless the operators are careful. Metallic rolls in good condition give very little trouble with eyebrows and clearer waste, and they will not lap if the staple is properly lubricated by the rayon manufacturer. The self-cleaning top clearer is the most satisfactory. The regular types should be cleaned or picked at every doff, because both the top and bottom clearers load very rapidly. If they are not cleaned on schedule, the waste builds up and is drawn into the fibers being drafted.

Two drawing processes are necessary, because one drawing does not parallelize the fibers sufficiently for good drafting on the slubber. Some mills use only one drawing, but quality and efficiency suffer. The drawing frames should be kept clean and the spoons and guides polished to remove any rough spots. The average textile plant produces a finished drawing sliver with a weight variation of 20 per cent. This variation is too high, and the problem in general deserves a considerable amount of thought and work on the part of the yarn mills and machinery manufacturers. It is desirable to maintain the drawing web reasonably taut and never to allow loops or folds to be drawn into the trumpet. There is no definite rule as to trumpet size, because the bulk of a 60-grain sliver will vary with the blend being processed.



It is necessary to keep the sliver cans in excellent repair. The inside of the cans should not be painted, because many paints and lacquers become tacky after prolonged exposure to the finish or lubricants on the rayon fiber. All types of fly frames are being used to process sliver into roving. The average print cloth mill uses a high-draft slubber and then spins direct with two ends up in spinning. These long-draft slubbers can usually handle 1½-inch staple, but if two-inch is to be processed, the roll stands will have to be changed.

Normal long drafts can be used. The twist is usually reduced for the longer staples, but it is bad practice to use too low a twist multiplier, due to the danger of stretched roving. The majority of blended and 100 per cent rovings will process efficiently with the following multipliers: .95 for one-hank roving, 1.00 for 1½-hank roving, and 1.20 for 3½-hank roving.

Cleanliness is very important on the slubbers, and it should be standard practice to clean the top and the bottom clearers after every doff. Because it is very difficult to clean the bottom clearers, this is an operation that the average slubber hand neglects. The operator running three machines will have the time to keep them clean if he is properly instructed. This point is stressed because the lower cleaners load up rapidly, and unless they are cleaned on schedule, the waste will feed back into the fibers being drafted. The flyers should be kept clean and polished. Synthetic rolls do a far better job on the slubber than they do on the drawing frame. Lapping is less troublesome because the twist which is being inserted is the roving.

The operators of the slubbers or fly frames should be instructed to use as little twist as possible when putting up an end on the frame. If these piece-ups are twisted excessively, they will result in a hard end. There are no definite rules concerning the lay, but this problem should be studied in each individual plane, because it will vary with the blend employed. In other words, one-hank roving made with 50 per cent 5.0 denier acetate and 50 per cent 3.0 denier viscose will be more bulky and require more space than would the same roving made entirely of 3.0 denier fibers. If the one-hank roving were made from 1.5 denier fibers, the lay could be much closer, because the roving will be more compact.

It is important to keep the aprons on the fly frames in very good condition. If the leather is old and cracked, excessive lapping will result. Synthetic aprons must be watched carefully, because some types form bulges or blisters and produce very uneven roving. If lint is allowed to accumulate within the loop of the apron, it creates uneven pressure while the fibers are being drafted. Some of the newest frames use only one apron. These frames are doing excellent work and are easier to keep clean. Of course, conventional drafting is used in many plants, and it is satisfactory with a lower range of drafting. .

The fly frame bobbins should be kept in excellent condition, free from rough places and grease spots. The rayon fibers will absorb grease very rapidly, and it is very difficult to remove in finishing. Some mills use cardboard tubes over their bobbins, and this practice is satisfactory. Skewer sticks should be well shaped, and there should be no undue pressure to act as a brake on the bobbin as it revolves in the creel.

Very few difficulties are encountered in spinning if the frames are in good mechanical condition and if the preparatory processes have been carefully supervised. All types of drafting are being used to spin synthetic fibers and blends. Many mills without long draft use the slip draft. Slip draft, which is usually limited to a draft of 16 to 18, allows the use of longer staples without too great an expenditure for conversion. Long draft frames are satisfactory and are widely employed. Conventional drafting is satisfactory within its range of draft.

Twist multipliers are usually specified by the fabric designer and will vary from 2.75 to 5.00. Maximum strength of 3.0 denier, 1½-inch blends is obtained with a

—It's Convention Season for the Textile Industry—

ANNOUNCEMENT of the third annual Southeastern Industrial Recreation Conference at the Charlotte (N.C.) Hotel, April 25-26, has been made by R. Thurman Taylor, Jr., general chairman. The program of this conference has been designed to aid industry in the building and operation of employee recreational activities. Well known recreation authorities will participate in the program. Previous conferences were held at Atlanta, Ga., and Birmingham, Ala.

The convention of the Cotton Manufacturers Association of Georgia, to be held at the General Oglathorpe Hotel in Savannah, will begin with a dinner meeting of association officers, directors and past presidents the evening of May 1. Regular convention activities will commence the next morning with a business session; this will be followed by a buffet luncheon, golf tournament and the annual banquet session. The final day, May 3, will include a business session, buffet luncheon and the annual meeting of the Textile Education Foundation, Inc.

May 4 is the date of the Southern Textile Association's second divisional meeting this spring. The S.T.A. Eastern Carolina group will gather on that day at the North Carolina State College school of textiles, Raleigh, for a technical session which begins at 10 a. m.

The three-day convention of the American Cotton Manufacturers Association at Pinehurst, N. C., will open with an afternoon business session May 14, this to be followed by an evening session. The next day's program will include sessions in the morning and afternoon and a banquet in the evening. The final day will be devoted to addresses, committee reports and election of officers. A skeet shoot and golf tournament will be sidelights of the convention.

For the first time since the fall of 1941, members of the Carolina Yarn Association will gather at Pinehurst, May 16-18 for three days of golf, skeet and other entertainment. Due to the reduction in the number of rooms available at the Carolina Hotel, association headquarters, invited guests this year this year will be limited strictly to mill executives. Registration of guests will precede a practice round of golf on the first day. Golf, skeet, tennis and riding, followed by a special entertainment in the evening, have been calendared for the second day. The third day will be devoted to the same sports, followed by a banquet, awarding of prizes and a special entertainment.

LOOM LEATHER POINTERS No. 2

TOP ROLL HARNESS STRAPS

The second in a series discussing the performance requirements of loom leathers

Strength
Flexibility
and
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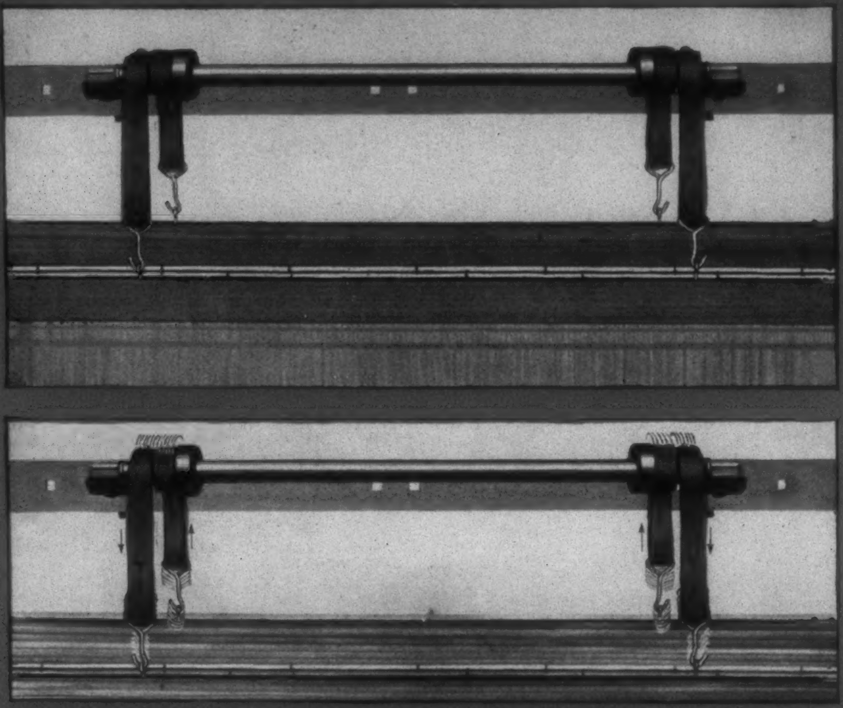

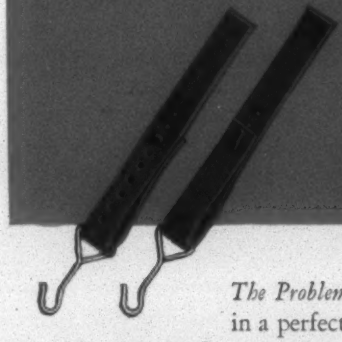

The Problem: to support the harness in a perfectly horizontal position at all times and to stand up under constant rolling over the top roll shaft.

Service Requirements: ability to withstand constant tension created by the weight of the harness and the intermittent pull of the jack strap and to resist internal and surface wear as it winds over the top roll shaft, and high tear strength to prevent separation at the top roll and hook ends.

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All products in Graton & Knight's ORANGE LINE of "Hairitan" loom leathers — pickers, check straps and other strappings — are identified by the orange color on the flesh side. Write for catalog on Graton & Knight textile leathers. Graton & Knight Co., 328 Franklin St., Worcester 4, Massachusetts.

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multiplier of 3.5. The maximum strength of 3.0 denier, two-inch blends is obtained with a multiplier of 3.3. With these multipliers the average breaking elongation of the yarn will be ten to 12 per cent. Good weaving requires at least ten to 12 elongation. If the average denier per fiber of the blend is greater than 3.0 more twist is required, as the coarse fibers are more difficult to twist in the fiber mass. It should also be pointed out that, unless more twist is used in the coarse blends, the yarn is often stretched between the front roll and the traveler. This will result in thick and thin places.

The average spun rayon can be spun with an end-down count as low as 25 to 35 per 100 spindle hours, provided the yarn contains sufficient fibers in its cross-section. Experience has shown that, for practical spinning, the minimum number of fibers per cross-section is 88 for 1½-inch staple, 78 for two-inch staple, and 68 for 2½-inch staple.

Fiber Length

The trend towards increased length of staple fiber, such as two or 2½-inch staple instead of 1½-inch, has increased the processing efficiency in the spinning mill and has made it possible to spin finer yarns from 3.0 denier rayon and coarser; that is, yarns with fewer fibers per cross-section. Another result of this trend has been an increase of five to ten per cent in yarn breaking strength.

Three-inch staple will also probably find its place in post-war blends for woven and knitted fabrics using 5.0 denier per filament and coarser fibers. Such yarns will be less hairy than when short, coarse fibers are used, and this will reduce fly on the knitting machines. Blends of coarse fibers medium count yarns, such as 18s to 26s, cannot be processed successfully in 1½-inch staple length if the blend contains sufficient coarser deniers to bring the average denier per fiber above 3.5.

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The field of coarser blends with 5.0 denier filament acetate in combination with 3.0 denier viscose has increased rapidly during the past several years and appears to have a promising future. Acetate fibers are soft and pliant, and the addition of these fibers to blends of viscose, cotton and wool produces fabrics of desired suppleness and draping qualities because the coarse fibers add bulk, but the fabrics remain soft and pliant. It should be noted that this desirable suppleness can be destroyed by stretching the yarns, by employing high twist multipliers, and by improper finishing techniques.

In warp preparation of spun rayon yarns, all types of cone and package machines are being used. Blends and 100 per cent yarns will perform efficiently at high and low speeds. These yarns produce uniform cones or packages for all types of warping, and the same rules that apply to cotton yarns hold true for the synthetics. Filling wind is usually employed for warp spinning, except when the Barber-Colman spooling and warping system is used, in which combination winds may be employed.

Cleanliness is very important in these operations, and the machines should be cleaned on the regular schedule. Tension devices, guides and slub catchers often load up: if they are not cleaned, the end will often break or the bunch of fibers will slip through and become attached to the yarn. Overhead cleaning systems are good, but they will not keep the slub catchers from building up. Humidities of 55 to 60 per cent are necessary for efficient processing of synthetic staple fibers. The opening and blending room should be conditioned to at least 60 per cent to aid the correct weighing of the blends and to obtain better laps on the picker. Excessive humidification will cause neppy carding and lapping of the drafting rolls.

Waste

The average spinning plant will make approximately nine per cent waste. More than one-half this amount is reworkable and can be added to new lots, as made up. However, it is suggested that the reworkable waste be recarded before being added to new lots. By recarding, the waste is made practically nep free and will not contaminate the new fiber in process. Some plants prefer to recard the waste from roving, etc., only after putting it through a two-section waste machine. Card and drawing sliver and lap waste are often added directly to new lots without any treatment. Other plants recard all the reworkable waste after putting it into laps. Automatic feeders are sometimes used to feed the waste card instead of making up the lap. Two flat cards can easily handle the waste for a 10,000-spindle unit producing 72,000 pounds of 20s yarn per 144-hour week. The reworkable waste can be carded at 16 pounds per hour.

The cylinder and flat strips from the waste card should be discarded and sold as waste. The fiber being delivered from the waste card can be fed into a container without putting it into sliver form, or the usual sliver can be made. If the waste is put into sliver form, it can be put back into process by feeding it in at the back end of the finisher picker. If one picker process *(Continued on Page 72)*

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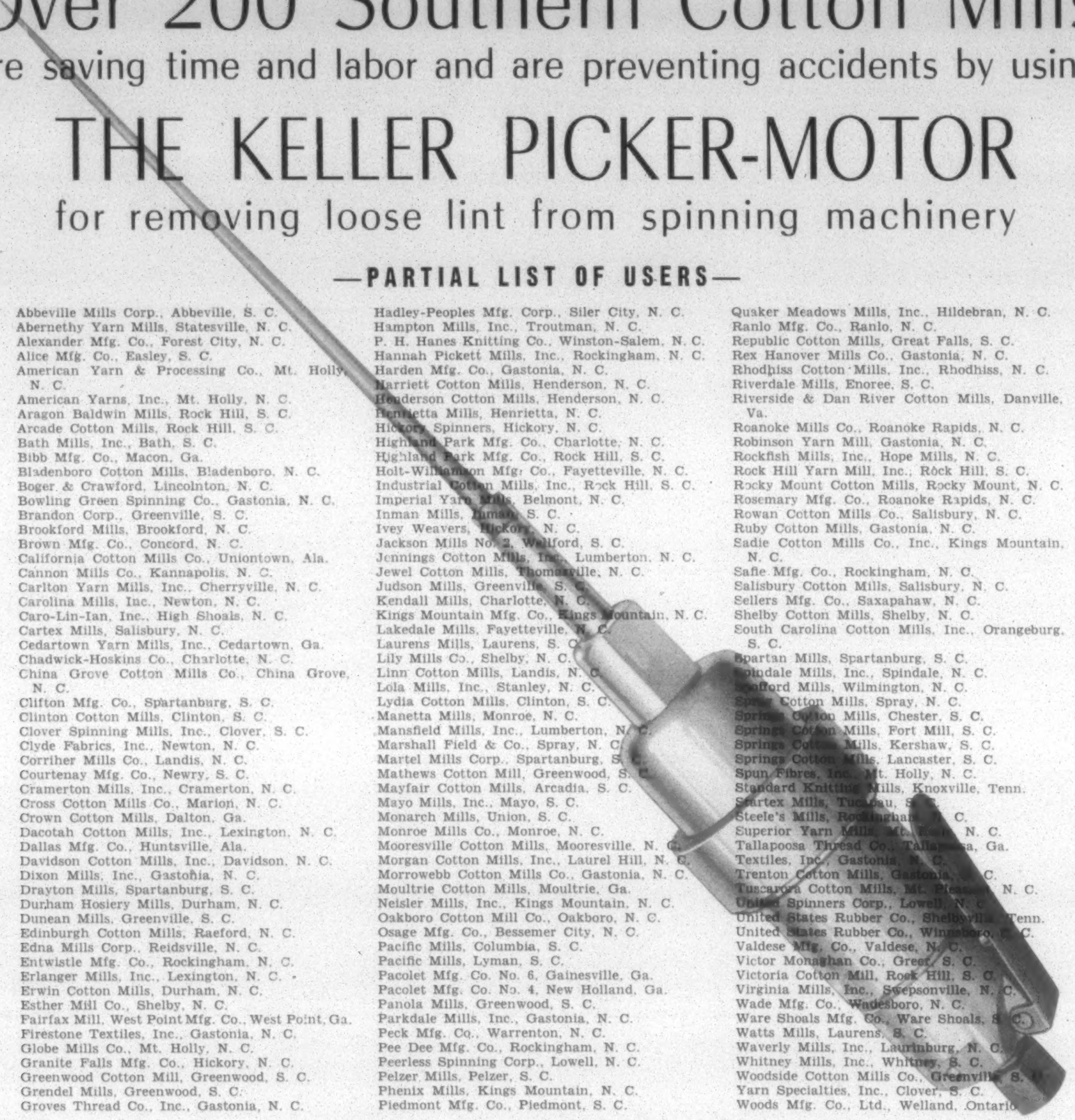

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Dyeing and Finishing

Proofing Textiles Against Microbiological Attack

By M. HOPLEY and J. R. F. JACKSON in Textile Recorder

MOLD and mildewproofing and rotproofing are largely concerned with the protection of textiles against microbiological attack. The term "microbiological attack" is a convenient description for the process by which textile materials are discolored or damaged by supporting the growth of the low forms of living matter classified broadly under the headings bacteria and fungi.

Bacteria are very small unicellular organisms which when suitably stained, and examined under the microscope show little evidence of internal structure. Moist surroundings and the presence of nitrogenous organic matter favor the growth of bacteria and for this reason they exist in great variety in the soil. All bacteria reproduce by simple binary fission but some types may also form spores or seed-like cells. Spore-forming bacteria are the type chiefly responsible for the destruction of textile fabrics. Some types of bacteria possess the power of independent movement but this feature is only evident if the medium in which they live is sufficiently moist.

Fungi, although included in the plant kingdom, differ from ordinary plants in their lack of chlorophyll, and in the fact that they nearly all absorb oxygen and liberate carbon dioxide. Fungi exist in enormous variety and range in size from the massive forms which are sometimes seen growing on rotting wood, to the minute forms responsible for the mildew damage of textiles; these latter varieties are commonly called molds.

Molds are larger and more complicated in structure than bacteria and their reproductive processes are more akin to those of ordinary plants. They produce spores in large numbers and grow more rapidly than bacteria, forming large spreading colonies on the surface of the material (the substrate) on which they grow. Molds usually prefer substrates which are rich in carbohydrates; they tolerate wider variations in osmotic pressure and humidity than bacteria and often flourish at lower temperatures. Like bacteria, molds are to be found in great profusion in the soil and play a similar part in maintaining fertility by breaking down organic waste matter into a form easily assimilated by plants.

It is this property possessed both by fungi and bacteria of breaking down organic matter into simpler substances which provides the textile chemist with the problem of mildew and rot damage to textiles. Everyone is familiar with the phenomenon of mildew or mold growth in one form or another. The "fur" which develops on rotting vegetable matter, e.g. badly stored fruit is a common example of mildew growth. Similar manifestitations of mildew growth are met with in the textile industry and vast quantities of cloth have been spoiled by the development of black or colored stains which are the common results of vigorous mildew growth. Not all kinds of mildew growth seriously degrade the cellulose of which the cotton fiber is composed, and in consequence the development of the mildew growth does not necessarily impair tensile strength very much. However, the unsightly stains which accompany mildew growth are sufficient to make it extremely undesirable, as the market value of the cloth is negligible once it is stained in this way.

Bacteria normally do not attack cotton unless it becomes contaminated with soil or is stored under conditions approaching 100 per cent relative humidity. For these reasons fungi constitute the only causative agent of the very majority of cases of microbiological damage met with in the cotton textile industry.

For the development of vigorous mildew growth, high humidity, a sufficient high temperature and a supply of oxygen are all essential, and it has been shown that goods stored in a dry atmosphere or in an atmosphere of carbon dioxide do not develop mildew. The rate of mildew growth is normally greatly accelerated by warmth providing that the humidity is sufficiently high. Another factor, ranking in importance with those already mentioned is the amount of readily available food in the form of size residues such as starch or dextrine and water-soluble salts present on the textile. These substances provide an ideal medium for rapid mildew growth; well-scoured cotton is not by itself a very good medium for supporting mildew growth and is thus less susceptible to mildew attack than fabrics in the gray or sized condition.

It may be asked where the spores of these fungiod growths come from. The answer is of course that fungus spores are always present in the air and are deposited on the surface of textiles by air currents. For this reason the presence of mildew-infected cloth in the same storage space as uninfected cloth is highly undesirable. The atmosphere of the room becomes highly charged with mildew spores from the infected cloth; these fall on the uninfected cloth and rapidly set up new mildew growth, especially if ventilation is poor. To minimize the possibility of mildew infection under normal circumstances without resort to the use of chemical protective agents it is therefore desirable to store the textiles in a cool dry atmosphere, to ensure adequate ventilation and to exclude foreign matter as far as possible.

Mildewproofing Agents

Chemical substances which prevent mildew growth on textiles are known as mildewproofing agents or fungicides, the protection they afford being mainly required either while the goods are being processed, stored or under shipment abroad. Mildewproofing as defined here does not imply therefore that the chemical treatment must be such that it will remain effective when the goods are in use or exposed out of doors to the weather, although in actual fact several substances used as mildewproofing agents have considerable resistance to weathering. Shirlan (salicylanilide) and Product VF (mercapto-benzthiazole) possess considerable resistance to leaching, especially if they are applied in conjunction with a water-repellent finish.

For the control of mildew it was at one time common practice in the cotton industry to employ zinc chloride as an antiseptic. This was added to the size prior to slashing and it was found that the addition of about eight per cent zinc chloride on the dry weight of size was sufficient to protect a gray cloth against mildew during subsequent shipment and storage except under the more severe conditions of temperature and humidity. However, the use of zinc chloride was the cause of much trouble to the cloth finisher because of the tendering which occurred during singeing. Alternatives to zinc chloride were also required because is was regarded as insufficiently certain in action and because it proved to be ineffective under very severe humidity and temperature conditions. Phenol, salicylic acid, formaldehyde and sodium silicofluoride were all tried as alternatives, but a satisfactory antiseptic was not forthcoming until the discovery by the British Cotton Industry Research Association of the remarkable antimildew properties of salicylanilide, now marketed under the trade name of Shirlan. This substance has proved to be an extremely effective fungicide and goes far to meeting the requirements for an ideal antimildew agent as it is colorless, odorless, non-volatile and non-toxic.

Other substances, notably the chlorinated phenols, nitrophenols, organomercurial derivatives and thallium carbonate, also have very marked fungicidal activity. Thallium carbonate is possibly the best substitute for Shirlan but its cost is prohibitive for anti-mildew purposes. The chlorinated phenols are too volatile to afford more than temporary protection, while the nitrophenols impart a yellow color to the fiber, moreover, both classes of substances are toxic and are liable to give rise to dermatitis troubles. The chief objection to the use of organomercurial derivatives is that they are unstable in the presence of other metals and in consequence it is difficult to apply them on ordinary textile machinery. It has also been reported that their fungicidal activity is inhibited by the presence of certain sulphur compounds.

These men took a 66-year-old German chemical, Copper 8-Quinolinolate, and reformulated it to produce Milmer, described as a versatile, efficient and long-lasting textile preservative. They are (from left) P. G. Benignus, Ira Hatfield and David Rogers, all members of the development staff of the Monsanto Chemical Co. organic chemicals division. Mr. Hatfield is holding an untreated swatch which decayed in seven days, while Mr. Rogers examines a treated sample that retained full tensile strength after being in the grounds 90 days.

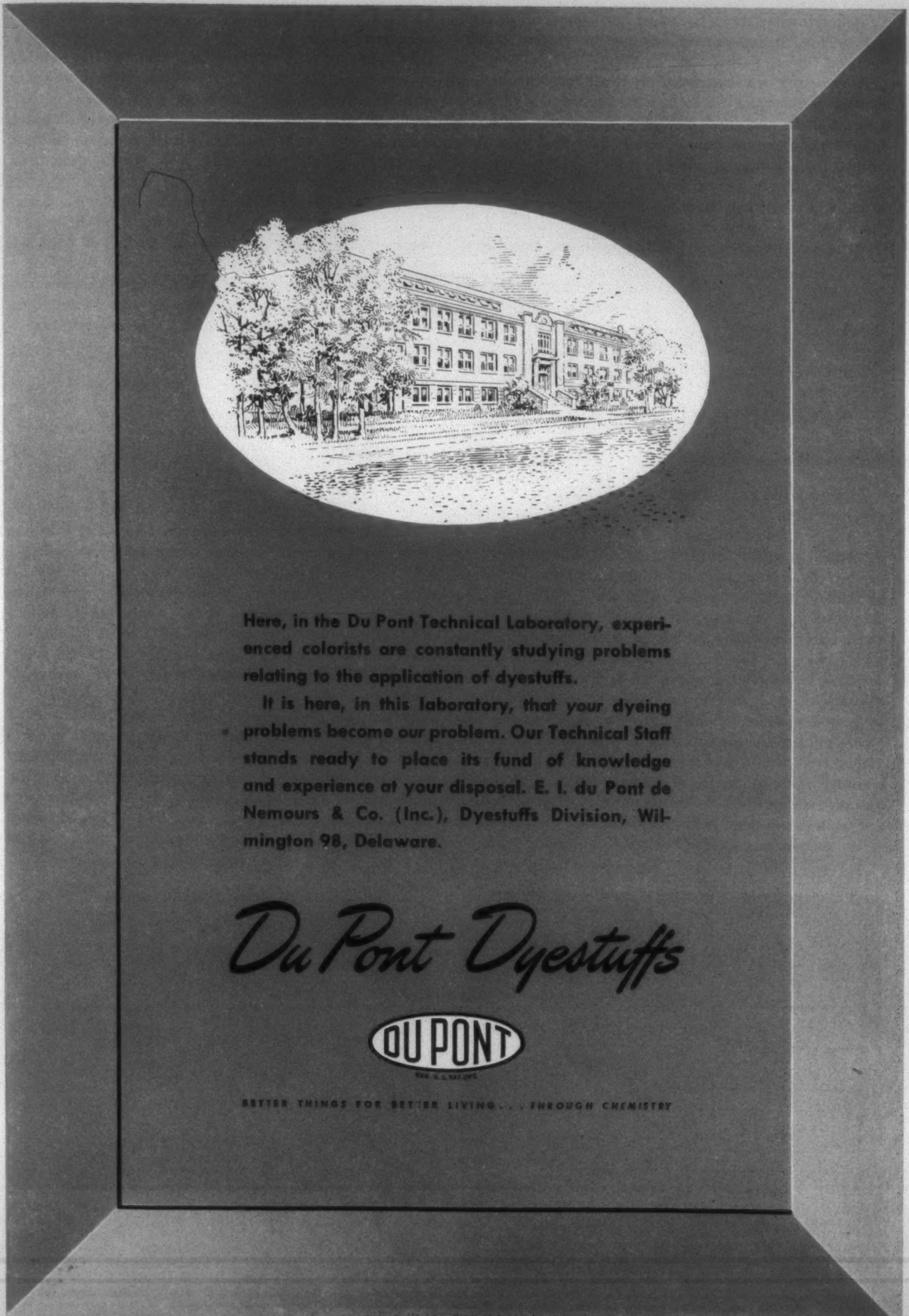
Shirlan and its sodium derivative have been in use now for over ten years, not only in the cotton and linen industries, but also in the woolen industry and their use has led to a great saving in money and valuable fabric. Other mildewproofing agents which are beginning to find favor, are mercapto-benzthiazole and 2:2′-dichloro-5:5′-dihydroxy-diphenylmethane. However, it seems unlikely that they will displace Shirlan to any large extent at present, in view of the proved value and all round efficiency of the latter.

Before leaving the subject of mildewproofing agents, it must be mentioned that, under certain circumstances, a single anti-mildew agent may prove ineffective. The reason for this is that fungicides are not equally toxic to every variety of fungus; however, this difficulty can be overcome in a relatively simple manner by using a combination of two fungicides as it is highly unlikely that a particular strain of fungus will be resistant to two fungicides, particularly if they are different chemical types.

Rotproofing

A rotproofed textile material is one which will resist the attacks of both fungi and bacteria under conditions of outdoor exposure either when contaminated with air-borne micro-organisms or with soil or other matter rich in cellulose-degrading bacteria. It will be appreciated that micro-organisms are not the only influences responsible for the deterioration of textiles when exposed outdoors; sunlight, air and water also play their part in the degradation and destruction of the fabric. Up to the present, unless the fabric is coated with some impervious substance such as bitumen or rubber, there is no chemical treatment which substantially reduces atmosphere degradation, although unfortunately some of the substances which provide a ready means of controlling micro-biological degradation, have the effect of accelerating deterioration by sunlight, air and water. Rotproofing, therefore, is concerned with the protection of textiles against micro-organisms, the treatment used being designed to retain its effectiveness under conditions of prolonged outdoor exposure. At the same time it is desirable that the treatment used does not accelerate deterioration from atmospheric causes.

In actual fact the definition just given represents an ideal which is not realized in practice, for, as will be seen later, most rotproofing treatments are compromises. If, however, the intended use of the fabric is known, it is usually possible, by selection of a suitable proofing treatment, to prolong the life of the fabric well beyond that of an unproofed fabric. The necessity for rotproof finishes to resist the leaching action of water is clear, since the fabrics to which they are applied are intended for use outdoors. Powerful antiseptics of the organic type, such as chlorinated phenols can at best only afford a temporary protection because of their poor resistance to weathering. For this reason, at the present time, the number of rotproofing methods employed on



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BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

cellulosic textile fabrics is limited and almost all of these are based on the use of substantially water-insoluble chromium and copper compounds.

Rotproofing processes based on chromium have the advantage of very good resistance to weathering and they also afford a slight measure of protection against the destructive influence of exposure to sunlight, air and water. Chromium proofings are sufficiently effective to protect cotton from airborne infection under conditions of high humidity and temperature, but it is not advisable to employ them if the fabrics to which they are applied are likely to be heavily contaminated for prolonged periods with soil or decaying vegetable refuse rich in cellulose-degrading fungi and bacteria. Copper compounds are extensively employed where protection against the destructive influences of micro-organisms is the primary consideration, but in general, copper treatments are less resistant to the leaching action of rainfall that are chromium proofings. On the whole, copper treatments are to be preferred where permanent contamination of the goods with soil is likely.

Processes Involving Chromium

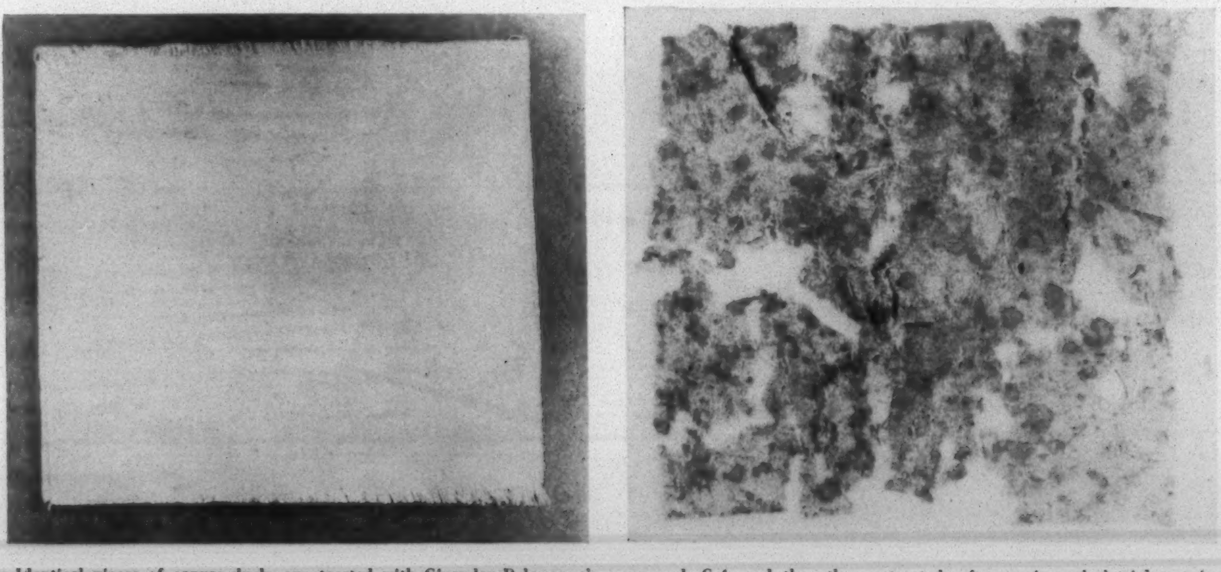
Mineral khaki processes are perhaps the best known of the chromium treatments. Mineral khaki proofing denotes the treatment of cotton goods, usually in piece form, with water-soluble salts of iron and chromium, these metals being fixed on the fiber in the form of their hydroxides, or hydrated oxides, by aftertreatment with alkali. The iron and chromium salts commonly used are the acetates. An alternative method of fixing the iron and chromium on the fiber is to replace the alkaline aftertreatment by treatment with potassium chromate. The advantage of the chromate method of development is claimed to be the enhanced mildew and rot-resistance which this method of treatment imparts. Improved mildew-resistance conferred by chromium in the hexavalent form would appear, however, to be of a temporary character under conditions of outdoor exposure, as chromium in this form is not very resistant to leaching with water, and furthermore there is the possibility that the hexavalent chromium will be reduced by contact with decaying vegetable matter to the trivalent condition, and hence lose its fungicidal activity.

The simplest form of chromium treatment is a so-called chrome tinting process. This involves impregnation first with basic chromium sulphate or acetate, followed by aftertreatment with alkali. Resistance of chrome-tinted cotton to micro-organisms appear to be similar to that of ordinary mineral khaki-dyed cotton, and, like mineral khaki treatment, chrome tinting does not speed up the destructive effect produced by exposure of the goods to weather. A modification of the normal chrome tinting process which is sometimes used, is the employment of an aftertreatment with copper sulphate. Normal chrome tinted goods, even after thorough rinsing, contain free alkali; this alkali is effectively neutralized by an aftertreatment with copper sulphate, forming basic copper salts which confer additional protection to the fabric.

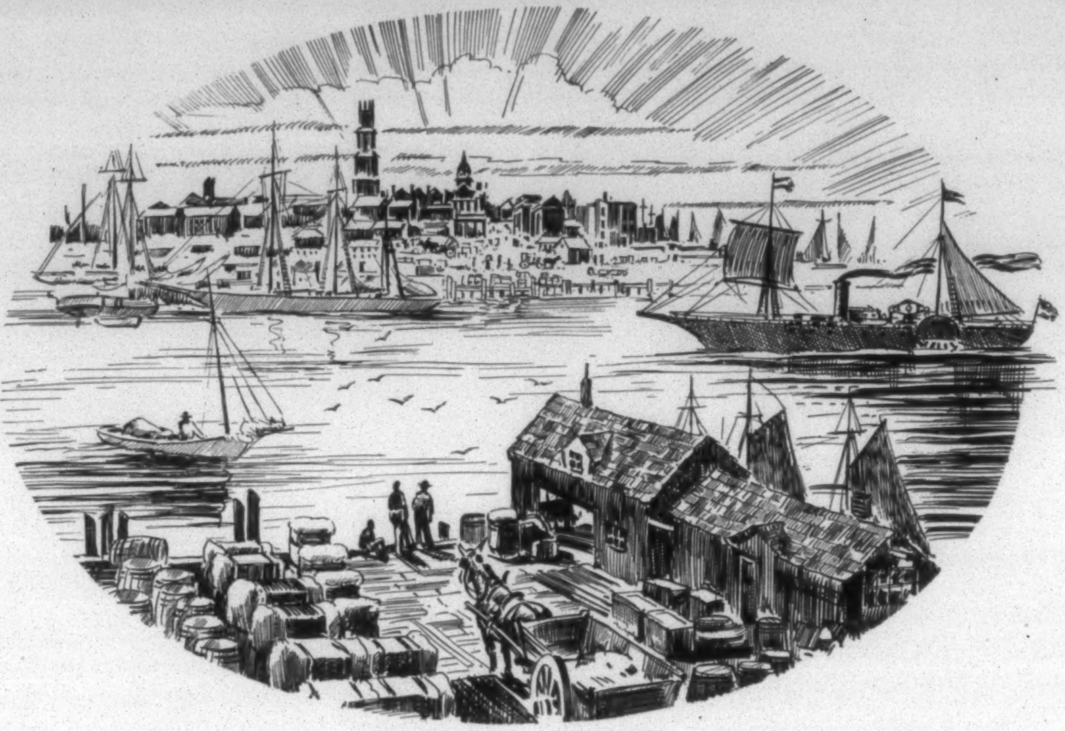
Chief Copper Rotproofing Processes

The chief copper rotproofing processes in common use at present are as follows: (1) treatment with cuprammonium hydroxide; (2) treatment with copper carbonate; and (3) treatment with copper soaps.

The oldest of the copper processes is that involving the use of cuprammonium hydroxide solution. The fabric is impregnated with the cuprammonium hydroxide solution and then dried to drive off ammonia and reprecipitate the copper as its hydroxide. The cuprammonium process involves the partial dissolution of the cellulose on the surface of the fabric, which becomes gelatinous. When the impregnated fabric is squeezed by the padding mangle the interstices of the fabric are considerably reduced in size by displacement of this gelatinous cellulose. After the fabric is dried and the cellulose regenerated not only has it acquired rotproof properties as a result of the cuprammonium treatment, but its resistance to water penetration is also increased by virtue of the chemical and mechanical modification of the fabric surface. The cuprammonium finish is employed for duck and canvas, but its use is somewhat restricted owing to the difficulty of preparing the cuprammonium solution



Identical pieces of canvas duck, one treated with Givaudan-Delawanna's compound, G-4, and the other untreated, after a six-week burial test in fungi-rich soil. The canvas on the right is so badly rotted that it is useless, while the sample treated with G-4 remains in its original state. The compound is said to preserve any type of textile material which may be subject to deterioration caused by fungi and bacteria attack.



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and the necessity for good ventilation or the use of fume extraction plant to cope with the ammonia vapor which is copiously liberated during the drying stage.

Possibly the simplest of the copper processes is the copper carbonate method of treatment. Treatment with copper carbonate can be carried out in two ways, either by first impregnating the cloth with copper sulphate and then fixing the copper as its basic carbonate by aftertreatment with soda ash, or, alternatively, the copper carbonate may be prepared as a suspension by direct addition of soda ash solution to copper sulphate solution, this suspension being used as the impregnating liquor. Both the cuprammonium and copper carbonate processes, although affording excellent protection against microbiological attack, have relatively poor resistance to weathering.

Copper soaps are sometimes employed as alternatives to the cuprammonium or copper carbonate methods of treatment. Copper naphthenate, oleate and stearate are the most commonly used; they are applied usually in the form of solutions in organic solvents or in the form of aqueous emulsions. Copper soaps have the advantage of being considerably more resistant to the leaching action of rainfall than the other copper treatments; particularly is this the case with the naphthenate and oleate. The degree of protection against microbiological attack afforded by copper soaps is reported to be the highest in the case of the naphthenate, and naphthenic acid itself is toxic to many kinds of micro-organisms, including those which are little affected by copper. The chief disadvantage of treatment with copper soaps is that the handle of the fabric is markedly affected, and in the case of copper naphthenate a characteristic odor is imparted to the cloth. For these reasons copper soaps have a restricted use for rotproofing.

This brief review outlines the chief mildew and rotproofing processes in use today. However, it is known that certain of the thermo-hardening formaldehyde resins enhance the resistance of cellulose textile materials to microbiological attack and it may be that future developments, especially in the rotproofing field, will be intimately connected with the extending use of synthetic resins in the textile finishing field.

Monsanto Develops New Textile Preservative

MONSANTO CHEMICAL CO. announced recently that its scientists have reformulated a 66-year-old German chemical to produce what the company describes as "the most versatile, efficient and long-lasting textile preservative known to man." When properly formulated and applied to fabrics by textile mills, the chemical is said to afford durable protection against air-borne superficial and rotter-type fungi as well as soil inhabiting organisms, thus greatly increasing the serviceability of domestic, industrial, agricultural and military fabrics.

As with the insecticide D.D.T., the parent compound lay dormant for well over a half-century before its potentialities as a fungicide were even considered. It was the South Pacific fighting, with its accompanying need to protect military fabrics against jungle rot, that prompted the investigation. Evaluative studies were nearing completion when the Japanese surrendered. Many hundreds of treated and untreated strips of cloth were buried in a greenhouse whose soil swarmed with destructive organisms. The scientists found that untreated fabrics were destroyed in from five to seven days, while companion treated samples retained full tensile strength after 90 days.

The parent compound is technically known as Copper 8-Quinolinolate, sometimes referred to as the copper salt of 8-Hydroxyquinoline. It will be marketed under the trade name, Milmer. Monsanto emphasizes that it is a preservative for mill application only, and that there is little likelihood of its use to treat fabrics inside homes.

The preservative treatment adds long life to items such as fish nets and lines, cordage, tents, tarpaulins, awnings, upholstery materials, shoe liners, fire and garden hose, bags, carrying cases and sporting equipment. Water sprays, weather exposure, sunlight and laundering appear to have little or no effect on its permanence as a textile preservative, Monsanto reports, adding that it is free from objectionable odor and compatible with water-repellent and fire-retardant finishes for textiles. The product has been found relatively free from skin irritation or toxicity to humans.

Textiles treated with the preservative are colored a light greenish-yellow shade which is light stable and a usable pigment for items such as awnings, canopies and upholstery materials. Where darker shades are desired the color of the preservative can be readily masked.

When properly formulated and mill-applied, the fungicide imparts all of the preservative qualities required in the following four major classes of textiles: (1) Textiles which will come into intimate contact with the earth and must therefore be rotproof. This includes items as sand bags and tarpaulins. (2) Textiles which only occasionally contact the ground but must remain mildewproof. Tents, many items of military equipage and cotton fabrics used for domestic, agriculture and industrial purposes are included in this category. (3) Coated fabrics which must remain mildewproof. These include rubberized coated materials, air forces fabrics, plastic coated textiles, certain tapes, etc. (4) Fabrics which may intimately contact the skin, such as clothing materials, mosquito netting, dress shields, mattress materials, sleeping bags, etc.

The parent compound, 8-Quinolinolate, was discovered by German chemists about 1880. So far as is known, no commercial use was found for the copper salt until Monsanto's investigation disclosed its potentialities as a fungicide. The research required the combined efforts and knowledge of chemists, biologists and application research personnel. The development was carried out by the biological group of Monsanto's organic chemicals divisional development department.

"Chemical Trail Blazers," a popular educational feature of the National Chemical Exposition sponsored by the Chicago Section of the American Chemical Society, will be expanded and given greater prominence at the next exposition, scheduled to be held Sept. 10-14, inclusive, in Chicago's Coliseum. Dr. H. E. Robinson, exposition chairman, announces that those who make the most outstanding contributions to this symposium of displays of new ideas, new discoveries, new developments and new applications in industrial chemical progress will be honored by the presentation of suitable certificates. "We are making preparations to present this feature, which drew such enthusiastic attention at its first showing in 1944, on a larger and more comprehensive scale at the 1946 exposition," said Dr. Robinson.

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Racketeer Refuses to Divide

The C. I. O. recently announced, as it has announced many times in the past, that it is going to organize the cotton mills of the South.

Believing that the "take" would be big, several other organizations immediately laid plans to "horn in" and a "Help Organize the South" organization was formed, by M. Moran Weston, at 210 West 125th Street, New York City, which is in the heart of the Negro section of that city, the section known as Harlem.

The Negro congressman from that section, Adam Clayton Powell, Jr., was to take the lead and the "Help Organize the South" announced it was to hold a parade and rally in Harlem. It invited Allan S. Haywood, C. I. O. organizing director, to speak.

Powell said in New York that his group got the endorsement of the New York C. I. O. before making its plans to charge admission to the Harlem event.

It looked like a good racket and the Harlem group was set for a big "take" when Van A. Bittner, who had been selected to organize the C. I. O. campaign in the South, announced that he would not accept help from the Harlem organization or any other group.

We doubt that any large portion of the money collected in Harlem would have reached the hands of the C. I. O. organizers and we have the suspicion that Organizer Bittner was aware of that fact.

Bittner made public a letter he wrote to M. Moran Weston in which he said:

> The Congress of Industrial Organizations is directing all work in connection with our organization campaign. The unions affiliated with C. I. O. have pledged the funds to carry on this work. Therefore, it is not necessary for your organization to function in any way in this organization campaign of the C. I. O.
>
> I am today having a press conference and notifying all newspapers, especially in New York, that your committee has no connection whatsoever with C. I. O.
>
> We do not need any money to carry on the organizational activities and furthermore as director of the campaign I say to you definitely that we will tolerate no interference from organizations outside C. I. O.

Bittner told the reporters he wanted to get these facts to the people of New York "so they won't give funds to this organization under the impression they will be turned over to the C. I. O."

Bittner very significantly added, "That goes for the Southern Conference for Human Welfare and any other organization living off the C. I. O. We don't want people to get us mixed up with all these other organizations."

Clark Foreman, president of the Southern Conference for Human Welfare, an organization which was spawned at the University of North Carolina, issued a reply to Bittner which said:

> The Southern Conference never pretended to have any part in the C. I. O. organizing drive. We have just as many A. F. of L. members on our board as C. I. O. members. We are in favor of all organized labor.

This is the first time that the Conference for Human Welfare has admitted the support which it has been giving to labor racketeers.

Although Clark Foreman had not said anything about communists, Bittner immediately came back with the statement:

> I don't know who is a communist and who is not. I have never heard anyone admit he was a communist, except for people running for office on a communist ticket.

Bittner said that he would move to Atlanta soon to direct operations from there. He said that a million dollar fund had already been pledged by C. I. O. unions; that close to 150 organizers were already at work in the South and that there would be more later.

In spite of the statements made by Bittner and his refusal to permit the "Help Organize the South" group of Harlem and the Communistic "Southern Conference for Human Welfare" to "horn in" on his racket, we are not very much concerned about his proposed campaign.

In fact, the C. I. O. is now upon the downgrade and has recently lost most of the elections it has instituted in the South.

At a recent election at the Mayfair Cotton Mills, Spartanburg, S. C., the vote was:

For the mill	521
For the C. I. O.	200

At the Eno Cotton Mills, Hillsboro, N. C., the vote was:

For the mill	358
For the C. I. O.	158

At the Goodyear-Clearwater Mills, Cedartown, Ga., the vote is reported to have been:

For the mill	640
For the C. I. O.	572

At the Bassett-Walker Knitting Co., a small plant at Bassett, Va., an election April 20 showed:

For the mill	60
For the C. I. O.	29

The C. I. O. has recently lost several other elections in Southern mills. In fact, we think that we are correct in stating that it has lost the last eight elections.

It takes more than a desire on the part of the C. I. O. and the use of the several million dollars it has taken from the pay envelopes of union members to cause Southern mill employees to join the C. I. O. and pay weekly dues.

The mill employees are free men and women and many of them feel that they are themselves capable of handling any complaints with their employers.

The long periods of idleness at the Erwin Cotton Mills, Gaffney Mfg. Co. and Industrial Cotton Mills and the immense price the employees paid through loss of wages has made a distinct impression.

In neither of these cases were the employees fighting for higher wages or better working conditions and they now know that they suffered wage losses solely in an effort to help the C. I. O. force the mills to collect union dues for them.

They realize that they were made to suffer in order that union racketeers might profit.

Industrial Research

The rapid growth of the chemical industry has no counterpart in American industrial history. More than in most industries that progress has been in large measure dependent upon research, both fundamental and applied.

Figures published by the U. S. Tariff Commission on dyes and other synthetic organic chemicals contain convincing proof of the value of research to our industrial life. Whereas the 1917 report listed 175 intermediates, 215 dyes, 16 lakes and 54 miscellaneous chemicals and materials of coal tar origin, the 1939 annual report covered 571 intermediates, 770 dyes, 60 color lakes, 228 medicinals, 187 flavor and perfume materials, 21 resins, 110 rubber chemicals and 395 miscellaneous items, totaling more than 2,300 products. When we compare these product developments with the reported expenditure of $2,000,000 for research in 1917 and an outlay of $29,000,000 for 1943, we find convincing proof of the value of research to our national well-being.

Recent announcements by many companies of large appropriations for research programs including plans for new buildings and equipment, give evidence of still greater advances to come.

We are, at present, realizing the benefits of pure research in the amazing list of new products that are being announc almost daily. Applied researsh carries on and adapts many of these discoveries and finds many new uses originally unforeseen. There is every reason to believe that these new products will have a profound and accelerated effect on our national economy.

The chemical industry fully realizes that it cannot hope to maintain its present position without a diligent and constant search for new products, improved products, and new uses for products already developed. — *Dyelines and Bylines,* Calco Chemical Division, American Cyanamid Co.

Additional Instruction for Organizers

Our attention has been called to the following newspaper notice which we had overlooked:

> Chapel Hill, N. C., March 22.—Approximately 35 officials, members of local unions in North Carolina and South Carolina affiliated with the American Federation of Hosiery Workers, will attend a two-day leadership training institute to be conducted by the Federation at Chapel Hill Saturday and Sunday.

Giving assistance to union leaders in training organizers in the best methods of disrupting manufacturing operations seems to have become a regular function of the University of North Carolina.

To the summer school for the training of union organizers a spring school has apparently been added.

There are now at the University of North Carolina many instructors who are well versed in various strike tactics because they regularly attended meetings of the strikers of the Erwin Cotton Mills, located at Durham, N. C., and assisted in keeping that strike alive for more than four months, during which the strikers lost $2,500,000 in wages, without gaining a single point.

The University of North Carolina will ask the next legislature to give it a large slice of the taxes collected from textile mills located in North Carolina, but its officials do not hesitate to seize every opportunity to assist labor racketeers in becoming efficient in promoting labor disturbances and strikes.

The Alabama Meeting

The editor of this publication had the pleasure of attending the meeting of the Alabama Cotton Manufacturers Association at Biloxi, Miss., on April 19 and 20.

It proved to be the largest and best attended meeting in the history of the association and a very interesting program had been arranged.

Hotel Buena Vista is located on the Gulf of Mexico amid beautiful surroundings and we have not recently seen another hotel so well and so efficiently operated.

One thing we like about meetings of the Alabama Cotton Manufacturers Association is the friendly atmosphere which always prevails.

As we stood upon the first tee and watched the participants in the golf tournament, we concluded that the mill men must work when at home, for we saw few drives which went as far as 100 yards, in fact the average appeared to be about 30 yards and some failed to get the ball further than the end of the tee. If many of the participants play golf at home they must have been affected by the gulf breezes, as the Gulf of Mexico was not more than 200 yards behind the first tee.

You MUST HIRE THIS MAN — -OR ELSE!
You CAN'T FIRE THIS MAN — - OR ELSE!
You WILL HOLD DOWN PRODUCTION — OR ELSE!
HA-HA!!
You WILL COLLECT OUR DUES — -OR ELSE!
-AND NO BUTS!
You WILL PAY OUR DEMANDS -OR ELSE!
DON'T YOU WORRY, LITTLE MAN. DO JUST WHAT MY GOOD FRIENDS TELL YOU TO DO AND PAPA WASHINGTON WILL HELP YOU. HE'LL TELL YOU JUST WHAT YOU CAN MAKE, JUST HOW MUCH YOU CAN MAKE, TO WHOM YOU CAN SELL IT, AND JUST THE RIGHT PRICE —OR ELSE PAPA WILL HAVE TO DO IT FOR YOU!!
B-BUT, GENTLEMEN
UNION CRATS
BUREAUCRATS
3,000,000 SMALL BUSINESSES

MILL NEWS

CONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASES

HAMER, S. C.—The Carolina Textile Corp.'s Mill No. 3 at Hamer, operating 13,464 spindles and producing 20/2 and 30/2 carded yarn, has been sold to Max Schiffman and associates of New York and reorganized as the Hamer Spinning Mills, Inc. The purchase price reportedly is $417,384. Mr. Schiffman has for some time owned the Macanol Mills, Salisbury, N. C. A. J. Wright will continue as superintendent of the Hamer plant.

MARIPOSA, N. C.—Alba Twine Mills, Inc., has been purchased by Erwin G. Glass of New York, and reorganized as the Warren Combed Yarn Corp. Hugh G. Putnam of Cherryville, N. C., is president and superintendent of the new organization, with Mr. Glass as secretary-treasurer. The spindles have been increased to 3,000 and combers added.

MORGANTON, N. C.—George W. Stowe of Belmont, N. C., has purchased Alpine Cotton Mills for approximately $450,000 from the stockholders, headed by Gordon Tate, president. Mr. Stowe is operator of several textile plants at Belmont. The Alpine plant operates 10,440 spindles, producing 8s and 16s carded yarns. The mill was built and equipped in 1895 by Mr. Tate's father and the Tate family has always had charge of operations. Mr. Tate has been president for the last eight years.

OPP, ALA.—Planned expansion of Opp Cotton Mills and Micolas Cotton Mills here provide for an additional 20,800 square feet of floor space for the Opp plant and 8,000 more square feet of floor space and a new wing providing 19,080 square feet for the Micolas plant. Materials are on the grounds and work has begun. As soon as the new wings are added, modern machinery will be installed.

TALLASSEE, ALA.—A cotton fire recently caused an estimated loss of $50,000 at Tallassee Mills. Approximately 2,000 bales were burned or damaged. The cotton was a portion of that which had been stored in the open during recent months.

LINCOLNTON, N. C.—G. L. Turner, formerly designer for the Highland Park Mfg. Co., Charlotte, and W. T. Turner of Lincolnton have established a textile plant which will be known as Turner Bros. Mill. A building has been erected on the road to Mooresville, about two miles from Lincolnton, and 30 Model E Draper looms will be installed. Broadcloths will be manufactured.

LENOIR, N. C.—Hayes Cotton Mill Co. of Lenoir, recently incorporated to deal in textile products, has purchased the 12,000-spindle Steele Cotton Mill Co. The mill owners have changed the firm name to Hayes Cotton Mill Co., with B. B. Hayes as president and his son, R. Barton Hayes, secretary and treasurer. The former carded yarn mill will be converted into a combed yarn mill for production of high quality sewing thread. New machinery will be installed and the number of employees increased. F. A. Thompson, associated with Steele since its organization in 1918, will remain with the new company as plant manager, and G. W. Haas will retain his post as superintendent.

COWPENS, S. C.—The plant of Cowpens Mfg. Co. has been taken over by Leading Cotton Mill, Inc., a corporation recently formed by Shelby, N. C., and Northern interests. W. J. Jones of Shelby is president; Harold Baum of New York, vice-president; and Leon Salkind of New Jersey, secretary-treasurer. The new corporation has an authorized capital stock of $1,000,000. Of this amount, $700,000 in preferred stock will be issued and the $300,000 of common stock will be held by Mr. Jones. Machinery has been secured from Gaffney (S.C.) Mfg. Co., and transfer of this machinery will begin at once, with operation to begin by June 15. The plant will have 22,000 spindles and 502 looms.

ASHEBORO, N. C.—A building now under construction and originally intended as a hosiery mill, has been leased by National Carbon Co. and will be used by that company for the manufacture of Krene waterproof fabrics. Operations in the 35,000 square feet plant will require employment of 300 persons. National Carbon secured the building from C. C., E. D. and Harold Cranford, who had planned to produce hosiery in it.

DALTON, GA.—Julian Longley has been named president and superintendent and J. K. Dickson, secretary, of the Dalton Textile Corp., organized for the manufacture of cotton yarns.

GREENVILLE, S. C.—Two college scholarships, to begin this fall, have been established by the John W. Arrington Foundation for dependents of Union Bleachery employees. Recipients of the $500 awards are to be graduates of any recognized high school, and selections will be made by the foundation board.

MONTGOMERY, ALA.—The spinning plant of West Boylston Mfg. Co., Montgomery, has been sold to United Elastic Corp. of Easthampton, Mass., manufacturer of webbing. The spinning company has 192 cards, 40,824 ring and 19,320 twisting spindles, as well as 28 broad looms.

ATLANTA, GA.—Whitfield Mfg. Co. has been organized here to manufacture and process cotton, rayon, woolen and other textile cloth. The corporation has been authorized to issue a maximum of $100,000 worth of stock with a par value of $100 a share. Incorporators are Mrs. E. C. Wright, Joseph F. Haas, and Sol I. Golden, all of Atlanta.

BURLINGTON, N. C.—Major Dye Works, Inc., has been incorporated to deal in manufactured articles. Authorized capital stock is $100,000 and subscribed stock is $300, by Brewer T. Horton, A. B. Mangum, and Geraldine Mangum Horton, all of Burlington.

Charters recently have been issued by the State of North Carolina to the following concerns: Dottie Lou Mills, Statesville; Eagle Fabrics Corp., Reidsville; Pharr Worsted Mills, Inc., McAdenville; Chatham Industrial Corp., Liberty; Velma-Craft Mills, Inc., Kings Mountain; Patterson Textiles, Inc., Marion; and Carolina Textiles of Conover, Conover.

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This long experience helped to give us the know-how in solving many wartime sizing, finishing and printing problems, and in meeting critical shortages by developing satisfactory substitutes.

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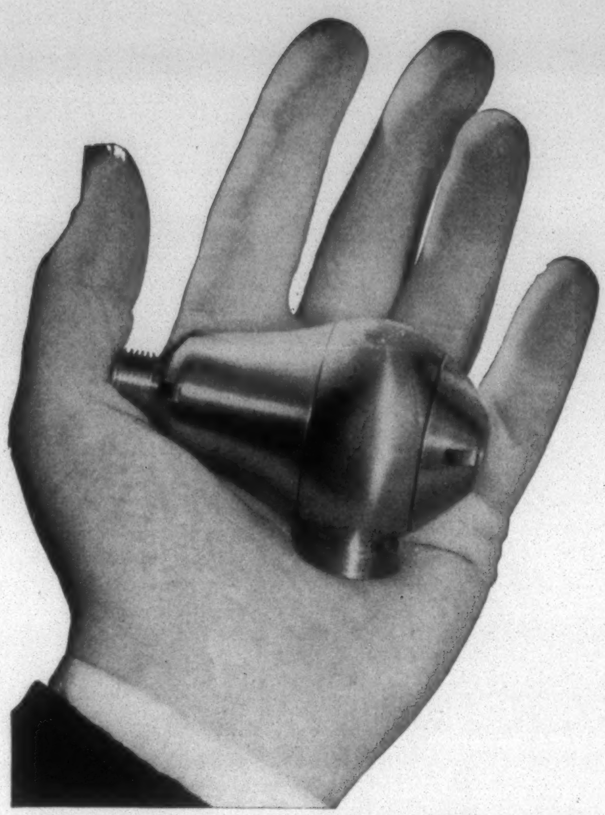

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Parks Turbomatic Atomizer

"leaks" *in one place;* where vapor is made and pushed out. Air pumped in comes out where it is supposed to. The TURBOMATIC (the atomizer with the diaphragm) is efficient . . . . Stays so.

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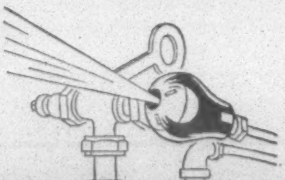

Parks-Cramer Company

Fitchburg, Mass. Boston, Mass. Charlotte, N. C.

Promotions, Resignations, Elections, Transfers, Appointments, Honors, Notes on Men in Uniform, Civic and Associational Activity

PERSONAL NEWS

James Webb, formerly vice-president, has succeeded S. S. Paine as president of Eno Cotton Mills, Hillsboro, N. C.

W. H. Gibson, Jr., has retired as general superintendent of Martha Mills, Thomaston, Ga., and has been succeeded by Turner Scott. Mr. Scott's former position as twisting division superintendent has been taken by J. M. Barfield.

G. R. Brook and H. E. Brook have resigned their respective positions of superintendent and assistant superintendent at Mary Leila Cotton Mill, Inc., Greensboro, Ga. G. R. Brook retains his duties as vice-president.

D. C. Gunter, formerly assistant superintendent of the Modena Plant of Ranlo Mfg. Co. at Gastonia, N. C., is now superintendent and James Cook is assistant superintendent.

John W. Cord has been appointed superintendent of Brookside Textiles, Inc., at Knoxville, Tenn., succeeding J. D. Barbee. Mr. Barbee has become assistant manager of Borden Mills, Inc., at Kingsport, Tenn.

R. V. McPhail has resigned as assistant manager of Ross Fabrics, Inc., Morganton, N. C., to accept a position with Covington Fabrics of New York City.

A. M. Stack, superintendent of Travora Mfg. Co., Graham, N. C., has been elected president of the Graham Rotary Club. . . . E. Lee Ramey, superintendent of Riverdale Mills at Enoree, S. C., has been named president of the Woodruff (S. C.) Rotary Club. . . . R. J. Jennings has been elected president of the Lanett (Ala.) Rotary Club. . . . W. A. Kennedy, president of WAK Industries and W. A. Kennedy Co., has been elected a director of the Charlotte Rotary Club.

H. L. Crowder has retired after nearly 30 years as traffic manager for Pennsylvania Salt Mfg. Co. and has been succeeded by J. G. Robison, his assistant for many years. William J. Robb has been named assistant traffic manager.

Col. Raymond C. Kramer, former chairman of the board of Belding Heminway Co., New York City, has been awarded the Distinguished Service Medal for services as chief of the general staff statistical section of United States Army forces in the Far East. . . . Dr. Harold DeWitt Smith of A. M. Tenney Associates, New York City, has been awarded a certificate of appreciation for services as a consultant to the Army Quartermaster Corps during the war.

J. C. Stone of Kingsport, Tenn., vice-president of Tennessee Eastman Corp., has been elected to the firm's board of directors.

Louis R. Mizell and Howard H. Brandt have joined the staff of Milton Harris Associates at Washington, D. C., where they will devote their time to wool processes.

Robert T. Stevens, chairman of the board of J. P. Stevens & Co., New York City, has been elected a director of Yale & Towne Mfg. Co., Stamford, Conn.

N. B. Nichols has been appointed director of the research division of Taylor Instrument Companies, Rochester, N. Y. He succeeds Dr. H. L. Mason.

A. Louis Oresman of the New York City accounting firm of Aronson & Oresman, has been appointed an advisor on textile and clothing prices and production by Economic Stabilizer Chester Bowles.

E. R. Van Vliet, former executive vice-president in charge of finance and accounting for Tubize Rayon Co., has been made treasurer of Celanese Corp. of America.

BACK TO CIVILIAN LIFE: Verd V. Mitchell, Jr., left, has joined the textile finishes and chemicals division of Sylvania Industrial Corp. as a member of the sales staff handling Ceglin cellulose ether finishes. He is a native of Alabama and was an Air Corps major during the war. . . . J. J. Love, recently a Navy officer and formerly superintendent of Ware Shoals (S. C.) Mfg. Co., has been appointed manager of Mayfair Cotton Mills at Arcadia, S. C. . . . W. P. Anderson and C. F. Wallace, both released from service with the Army, have resumed duties as representatives for Greensboro (N. C.) Loom Reed Co.

Edwin M. Clapp of Atlanta, manager of the Georgia Power Co. industrial power division, has been appointed divisional manager at Columbus, succeeding T. S. Sloan. Mr. Clapp also has been made a vice-president of the company.

William C. Cannon has been elected a vice-president of Cannon Mills Co., Kannapolis, N. C.

W. H. Taylor, formerly of Pelzer, S. C., is now manager of the Paw Creek, N. C., plant of the Kendall Co., succeeding W. H. Tedford.

Arthur F. Black, for many years associated with the textile industry, has been appointed head of the new engineering department of Jefferson Island Salt Co., Louisville, Ky. Mr. Black was with the War Production Board during the war, with headquarters at Charlotte, and prior to that was associated with E. I. du Pont de Nemours & Co. and Myles Salt Co. His new department will be designed to offer a technical service to textile mills and other industrial plants using salt.

C. Z. Adams, left, has been appointed as representative in the Greensboro, N. C., area for the Barber-Colman Co. of Rockford, Ill. He will handle the firm's line of automatic controls and air distribution products through the Chet Adams Co. He has been associated with the heating, ventilating and conditioning fields since 1930.

Sidney H. Little, formerly superintendent of National Dixie Mills, Inc., at Newnan, Ga., is now manager of Maine-Woolen Co., Barre Plains, Mass.

OBITUARY

William H. Harden, 80, for many years vice-president and treasurer of the old Wylie Mills at Chester, S. C., died recently at Chester. He is survived by a brother and a sister.

James E. Lathem, 79, pioneer Southern cotton broker and one of the founders of Pomona Mfg. Co. and Southern Webbing Mills, died recently at Greensboro, N. C.

Richard H. Dancy, 37, technical superintendent of the American Thread Co. plants at Dalton and Tallapoosa, Ga., was killed in an automobile accident April 6. He is survived by his wife and parents.

Wm. Kellogg Loomis, 63, credit manager for Wellington Sears Co., New York City, died recently at Bronxville, N. Y. He is survived by his widow, three daughters, a brother and a sister.

Charles H. Dimick, 61, president of Richmond (Va.) Piece Dye Works, Inc., and Fair Lawn (N. J.) Finishing Co., died April 8 in New York City. He is survived by his widow and a step-daughter.

Houghton Wool Tops

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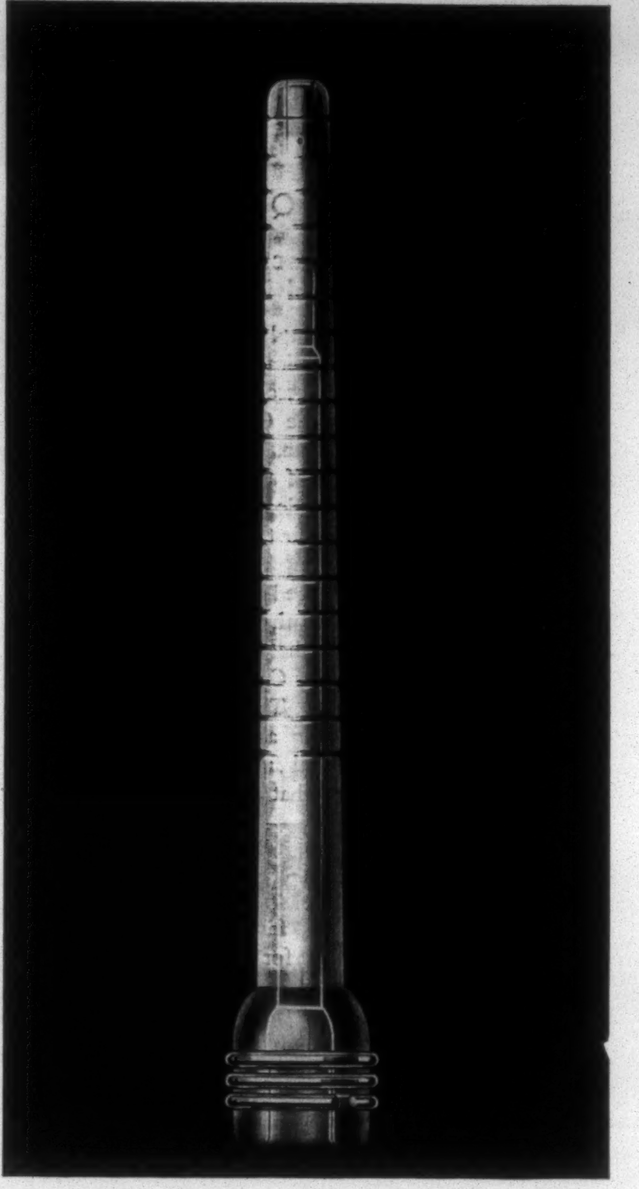

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EQUIPMENT — SUPPLIES — LITERATURE

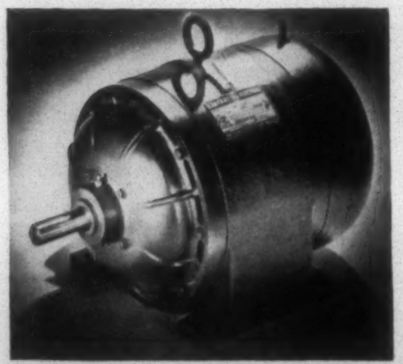
O.A.P.C. Issues Abstracts On Alien Chemical Patents

The second and final supplement to the abstracts of vested chemical patents has been made available, according to an announcement from the Office of the Alien Property Custodian. The supplement contains abstracts of about 800 patents and patent applications vested since publication of the first supplement in 1945.

The abstracts are grouped into 31 fields. Both the first and the second supplements may be purchased from the Office of Alien Property Custodian, Chicago 3, Ill., for $1 each. The set of original abstracts, covering about 8,000 patents in the chemical field, may be obtained for $25 from that office.

New Tri-Clad Motor Is Allied To G. E. Line

A new totally enclosed, fan-cooled motor especially designed for use in extremely dusty, dirty and corrosive atmospheres has been added to the line of General Electric Tri-Clad induction motors. (See cut.) The new motor is available in standard, explosion-proof, and dust-explosion-proof types from one to 1,000 horsepower and can be used where iron dust and metal filings are in the air and in Class I Groups C and D and Class II Groups E, F and G hazardous locations. Short in length and compact in construction, the motor can be installed in a small space.



The new Tri-Clad features a double-shell, cast-iron frame and cast-iron end shields and conduit box for protection from external blows, dripping water, dusts, vapors and corrosive liquids. Sealed end shields and inside joints, and a one-piece, double-shell stator protect windings, punchings and rotating parts from moisture or corrosive elements. Long, close-running shaft fits are supplemented by a rotating seal. Punchings and windings within the inner shell of the motor are cooled by a non-sparking external fan. Low starting current, with balanced design, makes the new Tri-Clad suitable for full-voltage starting, permitting the use of simple, inexpensive control equipment. The motor has high pull-up torque and high maximum running torque.

N. Y. & N.J. Lubricant Co. Opens Nashville Branch

New York & New Jersey Lubricant Co., manufacturer of Non-Fluid Oil, has opened a new branch office at Nashville, Tenn., it is announced by Falls L. Thomason, Southern district manager. Simultaneously, Mr. Thomason revealed the appointment of James A. Sorrells, Jr., as sales representative with headquarters at Nashville. Mr. Sorrells, who has had wide experience in the lubrication field, will cover the area which embraces the state of Tennessee and the adjacent part of Kentucky.

The Non-Fluid Oil organization, which celebrated its 50th anniversary of lubrication service to industry April 21, will announce more new additions to its sales staff and expansion of its sales and service facilities in the Southern territory in the near future, Mr. Thomason states, J. R. Huss has resigned as representative of the Western section of the North Carolina territory.

New Fashion Portfolio To Be Ready In May

The history of fashion, presented pictorially, is the subject of a new portfolio, *One World of Fashion,* by M. D. C. Crawford, scheduled for publication by Fairchild Publishing Co. May 1. Sixty 12 by 18 plates, carefully selected to illustrate the fabric and costume arts dating fram 3,500 B. C. to the Renaissance of Fashion, 1942, are presented along with introduction and descriptive text. It is said to be the only known single source depicting the growth and development of both world and period fashions. To complete the fashion picture, sections of the portfolio are devoted to jewelry, millinery and footwear, lacemaking, knitting and embroidery.

One World of Fashion is intended as a part of the working equipment of the designer, and as a basic guide for broader research, rather than as a reference work or a chronicle of the modes. It is expected to be of immeasurable value to professional designers, stylists, students and teachers of the costume and fabric arts, commercial artists, fashion advertisers, research people, museums, etc. Mr. Crawford has long been recognized as an eminent authority in the field of fabric and apparel design. He is research editor of Fairchild Publications, industrial advisor to the Brooklyn Museum, and a member of the board of trustees of the Textile Museum of the District of Columbia, Washington, D. C. His former literary works include: *The Heritage of Cotton, The Influence of Invention On Civilization,* and *The Ways of Fashion.* His new portfolio will be sold for $10.

Pittsburgh Division Buys Natrium, W. Va., Plant

Purchase of the large chlorine and caustic soda producing plant at Natrium, W. Va., from the Reconstruction Finance Corp. has been effected by the Columbia Chemical Division of Pittsburgh Plate Glass Co. The plant was built and operated by the division for the government's Defense Plant Corp. under a contract which included option to purchase. The acquiring of the Natrium plant is the first step in Columbia Chemical Division's expansion program, designed to meet the demand of industry for basic chemicals which are still critically scarce. The Natrium plant consists of six principal buildings, all functional in design and construction. They include a chlorine manufacturing building, machine shop, power house, caustic manufacturing building, administration building and a combination employment office and gate house.

Mill Air Conditioning Is Subject of Catalog

For the first time since Dr. Willis H. Carrier, air conditioning pioneer, introduced humidity and temperature controls to the textile industry in 1904, the fabric mills have a complete but non-technical textbook on the subject. Issued by Carrier Corp., Syracuse, N. Y., as one of a series of 36 new catalogs, the 40-page booklet explains the working of the familiar sling psychrometer, by separating the wet and dry bulb graphs on a series of a dozen charts simulating several weather conditions and explaining, step by step, how "outdoor" air is converted to proper indoor temperature and moisture.

While the benefits of air conditioning have been widely known to the textile trade for many years, the Carrier publication is aimed to take the mystery out of the fundamentals to reveal the simple relationship between proper atmospheric conditions and efficient production. Aside from providing practical gauge by which textile mill air conditioning can be operated most efficiently, the catalog also describes in detail six systems which can be adapted to the needs of individual textile mills.

Manhattan Wins Award For Public Relations

In recognition of the 1945 public relations performance of Manhattan Rubber Division of Raybestos-Manhattan, Inc., Passaic, N. J., the American Public Relations Association at its recent convention awarded Manhattan the silver anvil emblem of the association. The award, made in the field of management, was received by J. J. De Mario, Manhattan's member of the public relations committee of the Rubber Manufacturers Association. Other first awards received by Manhattan during the past 12 months were third time honors for its victory gardens from the National Victory Garden Institute, an award from the Direct Mail Advertising Association and two awards from the National Advertising Network, covering the division's employee relations program and its advertising and merchandising campaign, which represented some of the activities which were considered by the association in making this latest award.

Reynolds Metals Profits Show Appreciable Gain

Reynolds Metals Co. and its consolidated subsidiaries earned $4.03 per share of common stock, after provision for dividends on preferred stock, in 1945 as against $2.71 per share in 1944, R. S. Reynolds, president, announced in the comany's annual report to stockholders. Net profits after taxes were $4,396,187 in 1945, against $3,045,818 in 1944, the last full war year. Net profits before taxes were $8,364,487 in 1945, as against $11,815,158 in the previous year. Mr. Reynolds reported that the surplus increased from $13,467,350 at the end of 1944 to $22,099,059 at the end of 1945.

With regard to the future, Mr. Reynolds spoke of revolutionary uses for

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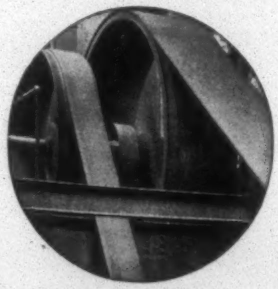
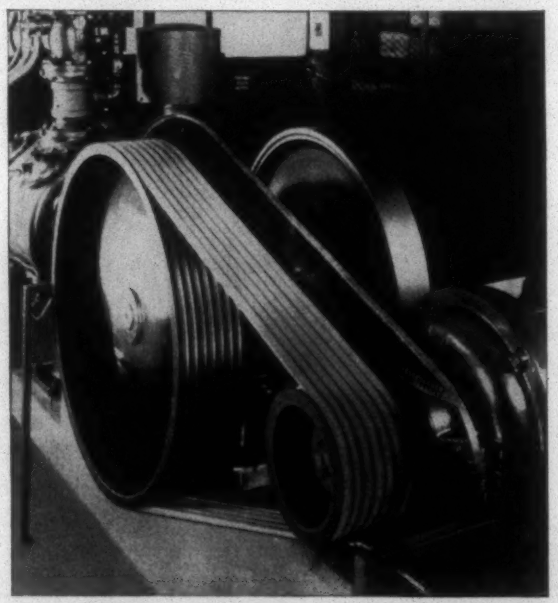

Transmission Belts

V-Belts ⟶

Hose



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aluminum, and pointed to the vast research activities of the company's staff of scientists who comprise Reynolds Research Institute, an organization whose sole aims are to find new applications for the light metal, and improve upon existing ones. He mentioned only a few of the hundreds of articles which will be made of the versatile metal, among which are fabrics.

York Corp. Effects New N. C. Distributor Set-Up

Providing wider distribution and service facilities for its refrigeration and air conditioning equipment, York Corp. has made two changes in its North Carolina distributor organization. One distributor, who has been with York since 1933, has moved to Raleigh from Wilmington, and a new additional distributor has been appointed in Wilmington. Sneeden-York Co., Inc., has opened new headquarters at 117 West Hargett Street, Raleigh, having previously been located at Wilmington. J. Earl Sneeden is the owner and manager of the company, and Paul O. Stahl is the manager.

In addition to its headquarters at Raleigh, Sneeden-York will have a display room and sales and service organization in Durham, N. C., and a resident salesman in Wilson, N. C. The new franchise is for the northeastern quarter of North Carolina, including Roxboro, Sanford, Wilson, Manteo and Greenville.

York's new distributor is Sneeden-Spivey Co., located at 1106 Market Street, Wilmington. W. B. Spivey, formerly with the U. S. Engineers, is manager; J. E. Sneeden, Jr., recently discharged from the Army, is in charge of merchandising sales; A. C. Craft is in merchandising sales, and Lee Raines is service manager. A resident salesman is located at Fayetteville. The new distributor at Wilmington will handle standard York equipment in the southeastern quarter of the state, including Beaufort, Bayboro, New Bern, Trenton, Clinton, Whiteville and Laurinburg.

Mathieson Pilot Plant To Co-ordinate Activities

In line with its program of expanding production and research facilities, Mathieson Alkali Works, manufacturer of a number of heavy chemicals and chemical specialties, will build a new pilot plant at Niagara Falls, N. Y. The structural steel for the building is on hand and construction will get under way as soon as real estate negotiations are concluded. Expected to cost $150,000, the pilot plant building will be the second recent addition to the company's facilities at Niagara Falls. Completion of another plant in that city, for increased production of sodium chlorite, has been previously announced.

With a view to increased co-ordination between research, sales development, and plant operations, Mathieson's research department was recently reorganized, with G. P. Vincent as technical director. Dr. Vincent is known as the inventor of the commercial process of manufacturing sodium chlorite and for his contributions to the practical application of sodium chlorite and other products in the textile and other fields.

Sinclair Co. Expands Its Accounts Division

The national accounts division of Sinclair Refining Co., New York City, has been expanded to offer industry an improved and specialized service where that is required. William Fletcher Farrell will be in charge of the division. Through personnel located in New York, Atlanta, Chicago, Kansas City and Fort Worth, the national accounts division will endeavor to solve the operating problems of national accounts and to help them standardize and simplify their lubrication and fuel schedules. In addition to servicing national accounts, the division also will co-ordinate trade relations for Sinclair in that field.

Bulletin Covers Uses and Application of Resins

The American Cyanamid Co. textile resin department has announced publication of a new textile finishing bulletin, No. 113, *Resins for Textiles.* It describes the uses and application to textiles of thermosetting resins (such as Lanaset resin for wool shrinkage control) and the urea and melamine resins used for crease resistance and

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permanent glazing of chintz. Thermoplastic resins and their use and application to textiles are also described. The bulletin is available upon request to the Textile Resin Department, American Cyanamid Co., Bound Brook, N. J.

Improved D. C. Rectifier For Magnetic Separators

A new line of rectifiers, designed to convert A. C. into D. C. for industrial use, is now available. These rectifiers are said to provide an ideal source of D. C. power for energizing such equipment as magnetic separators and lifting magnets. The new rectifiers have tubes mounted outside the main housing and protected by a perforated metal grill. This method insures proper ventilation and freedom from arc-backs under full load. Heavy-duty mercury vapor tubes are used to provide high efficiency, good voltage regulation, and extremely long life. The rectifiers are described as easy to install and contain no moving parts. Standard models are in stock for nearly any standard voltage and current requirements. Additional information may be secured from the manufacturer, Mellaphone Corp., Rochester 2, N. Y.

Proctor & Schwartz Will Manufacture Pin Tenters

Proctor & Schwartz, Inc., manufacturer of textile machinery at Philadelphia, has been awarded a license by John Dalglish & Sons of Glasgow, Scotland, for the American production of pin tenters. First of the machines produced in this country is expected to be in operation by November, and the firm should be producing between 25 and 30 pin tenters within the first 12 months thereafter.

Westinghouse Announces Sturtevant Reorganization

Facilities for production of the first industrial and commercial air conditioning systems to be wholly engineered and manufactured by one company have been reported by Westinghouse Electric Corp., Pittsburgh, Pa. To achieve these new systems the manufacturing and engineering facilities of the B. F. Sturtevant Co., purchased by Westinghouse in September, 1945, are being integrated with the facilities of the Westinghouse air conditioning division which has been transferred from Jersey City, N. J., to the Sturtevant main plant at Hyde Park, Boston.

Ellis L. Spray, Westinghouse vice-president in charge of the elevator and air conditioning divisions of the corporation at Jersey City, has been elected executive vice-president of the new organization, which is known as the B. F. Sturtevant Co., division of Westinghouse Electric. G. C. Derry, formerly vice-president of the Sturtevant Co., has been elected vice-president and general manager, and is responsible for the over-all operation of the business of this subsidiary, and E. B. Williams, formerly vice-president of the Sturtevant Co., continues in that office, with responsibility for continued development of the power and marine activities of the new subsidiary.

Bulletin Is Available On Cambridge Pyrometers

A 12-page bulletin, No. 194-SA, on Cambridge Surface Pyrometers for use in plant and laboratory has just been issued by Cambridge Instrument Co., 3110 Grand Central Terminal, New York 17, N. Y. It illustrates and describes the Cambridge Roll Pyrometer for determining temperature of readily accessible rolls or other convex surfaces; extension model for similar surfaces in hard-to-reach locations; Mold Pyrometer for mold cavities or stationary surfaces of almost any contour and the needle model for measuring subsurface temperature of materials in a plastic or semi-plastic state. Lists of typical applications, including several from the textile field, accompany descriptions of the various models. Among the 33 illustrations are many showing these instruments in use on a wide variety of production operations.

New Anion Exchange Resin Shows High Versatility

Development of an improved acid absorbent or anion exchange resin with wide usefulness in the fields of water-conditioning and in numerous applications calling for the removal or recovery of acid is announced by Resinous Products and Chemical Co., Philadelphia, Pa. Known as Amberlite IR-4B, this improved resin is claimed to produce "deionized" water comparable in quality with distilled water and to provide an unusually convenient means of

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purifying drugs and biologicals by the elimination of acidic contaminants present or introduced during preparation.

Amberlite IR-4B, with its outstanding resistance to the leaching action of water, acids and solvents, has replaced Amberlite IR-4 for all industrial applications, its range of usefulness widened in deacidification processes where absence of contaminants in the treated product is essential. The outstanding stability of Amberlite IR-4B, according to the manufacturer, is evidenced in its resistance to the aggressive action of formaldehyde and formic acid as well as a variety of chemical reagents and solvents. The new exchanger exhibits an increased rate of exchange, permitting higher flow rates during operation. It can be regenerated at higher rates than those recommended for Amberlite IR-4 and can be regenerated by strong alkalies such as sodium hydroxide. Other advantages include absence of objectionable color - throwing, lower rinse requirements and reduced packing.

U. S. Rubber Develops Kandarizing Treatment

A textile treatment to give fabrics a permanent "starch" has been announced by the Naugatuck Chemical Division of United States Rubber Co. Invisible on the fabric and claimed to be unaffected by laundering and dry cleaning, the new textile treatment is said to give the fabric a permanent "starchiness" under all weather conditions. The treatment, called Kandarizing, is non-toxic, non-irritating and will not tenderize a fabric, according to the manufacturer.

Also making use of a new synthetic resin, the textile treatment adds only 1½ to two per cent to the original weight of the fabric, it is claimed. Applied at the time of manufacture in the form of a water emulsion, the treatment is said to lend itself readily to present textile processing equipment, require no cure and to be unaffected by bleaching agents. Fabrics are immersed in the emulsion, squeezed and dried at a temperature ranging from 212 to 250° F.

All-Out Dry Chemical Fire Extinguisher

The All-Out dry chemical fire extinguisher, designed to combine high efficiency under most conditions with maximum protection to the user and to equipment installations is being distributed by Pressurelube, Inc., of 609 West 134th Street, New York 31, N. Y. The All-Out dry chemical is ejected under pressure in a flat stream which separates the flame from the burning material; it forms a dense, smothering cloud over a flaming area up to a distance of 18 feet, and creates an insulating barrier between the operator and the flame, providing protection from radiant heat.

Important features claimed by the manufacturer include the following: forms no toxic gases; non-conductor of electricity; non-abrasive; harmless to finished surfaces; easily removed with a brush; squeeze grip nozzle for positive control; lighter weight permits easy carrying and use by men or women; chemical will not deteriorate or cake; easily refilled, requiring no special tools or equipment. The unit meets requirements of the Associated Factory Mutual Laboratories and the Underwriters Laboratories.

First Complete Safety Directory Is Published

For the first time in the safety field there will be available to management officials, safety directors, purchasing agents, insurance engineers and medical personnel a complete safety directory and catalog, in one cover, under the title of *Best's Safety Directory and Catalog*. It will give a complete, illustrated compilation of all safety, hygiene, first aid and fire protective products and devices. It lists all products, equipment and devices related to safety and accident prevention; it describes fully each product in its specific category; it gives the uses of each product; it lists the manufacturer and provides a geographical list of local dealers and distributors. The first annual edition will be ready in the fall of 1946. Published by Alfred M. Best Co., Inc., 75 Fulton Street, New York 7, N. Y., it may be ordered for $5, postpaid.

Job Evaluation, Wages Considered in Report

Specific recommendations for setting up a balanced wage structure through job evaluation are presented by the Labor Relations Institute, 1776 Broadway, New York 19, N. Y., in a special report to its members entitled *How to Control Your Labor Costs Through*

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Job Evaluation. The report analyzes tested techniques of job evaluation, and presents a description of the advantages of the four principle job evaluation systems, with charts and diagrams of each. It lists the problems faced by employers in installing a job evaluation system and suggests procedure and contract clauses to be used to assure union-employee co-operation and successful operation of the system. Ten steps are taken by the expert in setting up accurate job analysis, as a preliminary to job evaluation, the report says. The standard factors in analyzing and rating jobs are listed in the report.

Du Pont Planning New Offices in Charlotte, N. C.

E. I. duPont de Nemours & Co. will erect immediately a three-story office building on West Fourth Street, Charlotte, N. C., to serve as Southern headquarters for the firm. The building will cost several hundred thousand dollars and will consist of three stories and a basement. The first two floors will be devoted to offices and used to direct textile sales activities of the organization throughout the South.

General Mills Brochure Relates Story of Guar

A brochure entitled *The Story of Guar,* released by General Mills Research Laboratories, traces the history and development of guar and its use in textile and other industries. The brochure is available upon request to General Mills Research Laboratories, 2010 East Hennepin Avenue, Minneapolis 13, Minn.

Government Report Covers Coated Fabrics In Reich

German manufacture of polypvinyl chloride coated fabrics and films by use of the paste dispersion method is reported by U. S. investigators as being the most outstanding development in the German coated fabrics industry, according to the Office of the Publication Board. A description of the new technique is contained in a general survey of the coated fabrics industry in Germany, Report No. 2335 (46 pages and nine plates), available from O.P.B. on order, in photostat form at $4 and on microfilm at 50 cents. The report was prepared by De Forest Lott and William D. Hedges, investigators for the technical industrial intelligence branch of the Joint Intelligence Objectives Agency.

The report covers the following subjects: oil cloth, nitrocellulose coated fabrics, polyvinyl chloride coated fabrics and films, and miscellaneous coating materials. Discussion of general conditions in the German coated fabrics industry, as well as of processes, formulas, equipment and other pertinent matters are included.

The Germans are reported to have made wide use of the paste dispersion method of coating fabric with polyvinyl chloride resin. The resin, plasticizer and pigments were mixed together, applied in the form of a paste containing 100 per cent solids, and then fused under high heat. This is said to have resulted in a tough, flexible film or coating. Paste applications were used, with eminent success, on a wide range of materials, including lightweight coatings of about two ounces per square yard, standard coatings of eight to 12 ounces per square yard for upholstery and leather goods materials, and shoe

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soling material. Emulsion coatings of polyvinyl acetate reported were used extensively in Germany as a substitute for oil cloth and for shoe inner soles and linings. Though fabrics with this type of coating do not possess the low temperature flexibility of the vinyls, oils, or nitrocelluloses, they are said by the U. S. investigators to be of good quality.

Polyisobutylene, known in Germany as "Oppanol," apparently was used extensively as a coating for gasproof clothing during the war. The best sample seen by the investigators had a dry finish coat of nitrocellulose. Heavy, unsupported films of polyamide resin have been used experimentally by a German company for pocketbooks and a general line of leather goods and upholstery. At present it is being made only in sheet form and apparently has excellent physical properties for these uses. The investigators point out, however, that the potential significance to the U. S. coated fabrics industry of these German developments cannot be determined until samples brought back by the investigators have been subjected to evaluation tests.

Alemite Volume Covers Principles of Lubrication

Man's age-long struggle with friction, beginning with the discovery of prehistoric man that it was easier to roll a log than to drag it, and concluding with lubrication recommendations for all types of modern machinery, is the subject of a book published by the Alemite Division of Stewart-Warner Corp., Chicago, Ill. Entitled *Alemite Answers,* it is a graphic presentation, with illustrations of hydrocarbons cavorting in animated-movie style and cutaway views of bearings and other friction points, to demonstrate, in laymen's pictures and terms, the how, what, when, where and why of lubrication. The book is for distribution at $3 per copy through the Alemite distributor organization, to industry and the automotive, marine and aviation fields. In addition, copies will be made available to engineering and technical schools, designers, engineering societies and other individuals or groups concerned with machinery.

The book is divided into seven chapters, with self-explanatory headings. These are: "Explaining Petroleum and Its Chemistry;" "Considering Refining and Testing of Fuels;" "Studying Refining and Testing of Lubricants;" "Clarifying Lubrication and Lubricants;" "Demonstrating Application Problems and Solutions;" "Relating the Story of Alemite," and "Defining Purchasing and Selling."

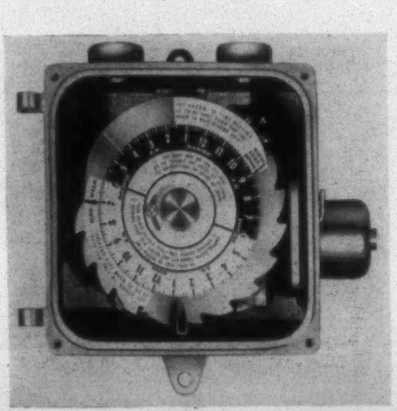
The Alemite division of Stewart-Warner produces lubrication systems, fittings, compressors and other lubrication equipment, and was the originator of pressure lubrication, or introduction of lubricant to a bearing through a fitting or nipple. It also markets Alemite specialized lubricants, including motor oils and industrial oils.

Goodrich To Spur Output Of Geon Polyvinyl Resins

An expansion program to more than double manufacturing facilities for Geon polyvinyl resins is announced by B. F. Goodrich Chemical Co. A portion of the new output will be available during the summer of this year and the balance of the facilities will be in production early in 1947. Geon resins are now employed in the manufacture of upholstery, waterproofing of all kinds and many other applications. Goodrich operates plants in Ohio, New York, Kentucky and Texas.

Automatic Devices Promotes Weather-Man Control Unit

The Weather-Man, a product of weather controls division of Automatic Devices Co., Chicago, Ill., is designed to provide in one unit an automatic thermostatic control, actuated by outside temperatures, for controlling the heating of a building. According to the manufacturer, building heat requirements are "anticipated" by the Weather-Man. (See cut.)



The Weather-Man is intended to replace the inside room thermostat, the day-night switch and the 65° high limit thermostat. By combining the functions of several instruments in one unit, it simplifies the wiring, reduces service and maintenance calls and, in addition, provides all of the advantages of outside control at a cost comparable to the cost of the ordinary controls it replaces, the manufacturer claims.

The Weather-Man can be used to operate any gas or oil burner stoker, circulating pump, fan, motor valve or zone valve. It can be used with all types of heating systems—steam, hot water, warm air or panel systems. It will control the heating of homes, apartments, commercial and industrial buildings.

Wright File Develops Electric Cable Hoist

A complete line of electric cable hoists is being carried by Wright File Co. of Lisbon, Ohio, which, during the war, in lieu of a satisfactory electric hoist, designed and built an electric hoist that is said to accomplish what heretofore was thought impossible in that form of hoist. The Wright electric cable hoist was used by the company to handle the heavy parts it was manufacturing for Army ordnance. Due to the subsequent demand from private industry, Wright expanded its activities under the name of Lisbon Hoist & Crane Co., incorporated in the Wright plant. The company won the Army-Navy "E" and the Navy "E" for wartime production.

Tennant Floor Machine Described In Bulletin

G. H. Tennant Co., manufacturer of industrial floor maintenance equipment, recently has issued an illustrated two-color bulletin which describes the electric, self-propelling Model J Tennant floor machine with 12-inch drum-type accessories. In requesting this bulletin address the company at 2530 Second Street North, Minneapolis 11, Minn.

'Chemicals for Industry' Is New Technical Volume

A 212-page illustrated catalog, *Chemicals for Industry,* has been published by Rohm & Haas Co. and its associated firms, Resinous Products & Chemical Co. and Charles Lennig & Co., Inc., all located at Philadelphia, Pa. The new volume describes in considerable detail all of the companies' products and developments up to the present time. Particularly interesting is the 25-page chapter devoted to Rohm & Haas textile chemicals; described in detail are the applications of reducing and stripping agents, synthetic resin finishes and sizes, acrylic resins, enzymes, wetting, scouring and dispersing agents, fungicides and humectants. The back section of the book contains a helpful glossary which lists and describes briefly all products manufactured by the three companies.

Chemicals for Industry will not be distributed widely due to the technical nature of its contents and the fact that its appeal is limited to a small and select group of persons. Further information about it may be secured by writing to Rohm & Haas at Washington Square, Philadelphia 5, Pa.

Dexter Textile Chemists Broaden Firm's Function

Functioning since the first of this year, the textile chemical division of the Dexter Chemical Corp., New York City, has made substantial strides, according to Joseph B. Evans, left, its director of sales. Representatives have been in the field for some weeks, servicing the inquiries which followed in the wake of the initial announcement of the enterprise. Actual orders have reached a volume exceeding expectations and plans for plant and laboratory expansion are under consideration. It has been necessary to provide increased facilities for the extensive research being carried on looking toward further improvement in the product, Kopan, and the broadening of its sphere of usefulness. Similar steps are to be taken in connection with Dypenol, the company's mercerizing penetrant.

Calco Releases Bulletin On Vat Dyeing Principles

Calco Technical Bulletin No. 785, *Some Fundamental Principles of Vat Dyeing*, has been released for distribution to the textile industry by the Calco Chemical Division of American Cyanamid Co., Bound Brook, N. J. The bulletin is especially timely in view of the increasing attention given to vat dyes and their use by textile chemists and dyers; certainly those with little previous experience in this field will have to master their properties and dyeing methods. Dyers who have gained experience during the past several years on O. D. shades and the relatively few shades used in their production, may have to refresh their knowledge of the properties and application methods of the full range of vat dyes used to meet the civilian demand for countless shades of yarn and fabrics containing various fibers. It is also pointed out that newly devised methods of vat dyeing may be more effectively used if the vat dyer has a sound fundamental knowledge of vat dyes and their behavior.

The new bulletin discusses the general dyeing characteristics of vat dyes, methods of modifying and controlling the dyeing behavior and the effect of temperature on the reduction rate of vat dyes. It also discusses the influence of temperature and assistants in the stripping of vat dyeings. A copy of Calco Technical Bulletin No. 785 may be obtained by writing the advertising department, Calco Chemical Division, American Cyanamid Co., Bound Brook, N. J.

Autumn and Winter Tints Presented In Color Card

Winter tints, reflecting new variations of the off-white theme, and autumn pastels of middle tones feature the lighter side of the fall color scale, as highlighted in the confidential advance edition of the 1946 fall woolen collection, issued by the Textile Color Card Association. The former group includes French Champagne, Amber Blond, White Smoke and Cream Bisque. Interpreting the autumn pastels are Horizon Gold, Frost Aqua, Glory Pink and Sunlit Green.

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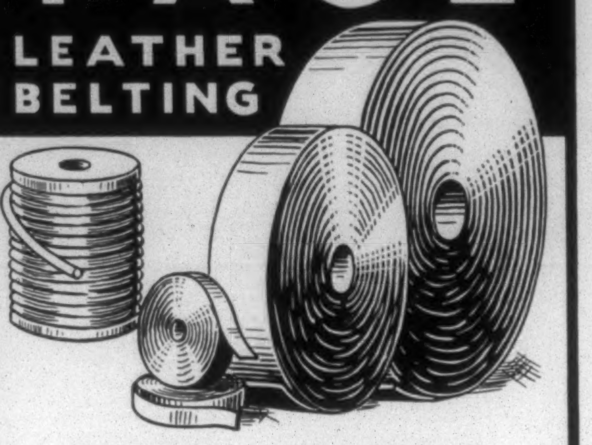

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Processing of Rayon Staple

(Continued from Page 48) only is being employed, it is best to add the waste to new lots or blends without putting it into sliver form, as the waste should be weighed out and added in the correct proportions.

In my opinion, it is a combination of little things which produces high quality yarns and fabrics. With this thought in mind, fabric and yarn imperfections will be discussed briefly from both human engineering and mechanical engineering standpoints. It is thought that at least 60 per cent of all yarn imperfections are caused by improper piecings. This trouble is usually found in every department of yarn manufacture.

If two picker processes are being used, the picker operator or attendant should be instructed to start the new lap carefully and not let the new end overlap the end running out. If a heavy section is delivered to the feed rolls, the evener motion will reduce the feed roll speed, but the beater blades will pull off chunks of fiber, and the opening is thereby impaired. The pins are overloaded and will roll the stock before it is drawn to the cages. This is especially true when the longer staples, such as two-inch and 2½-inch fibers are being processed. Those heavy lamp sections are more critical at high card speeds than with the lower speeds If the card tender lets the new picker lap extend over the end of the card lap running out, the card is overloaded, the licker-in may choke, and neppy stock will be delivered in the sliver.

Improper splicing or picking up on the drawing frames makes it impossible to obtain even drafting. Many drawing frame operators allow the sliver to extend from the spoons to the back roll when a new end is being put up after a break or failure. Of course, this is the easiest way to get the frame running again, but it does more than just increase the weight of the delivered sliver. The operator seldom has the end of the sliver parallel to the other slivers, and an inch or more is fed in at right angles to the other fibers. This causes a lump which is not removed completely in subsequent operations. In piecing up slivers, the two ends should be connected by or with a very small amount of twist by twisting the tapered ends together.

It is common practice for the operator of a fly frame to insert excessive twist when threading up the flyer after a failure to roving break. The amount of twist inserted usually depends on the length of operator's hand. This additional twist in the roving will often cause the end to break down in spinning, or it may make a series of slubs. For instance, a normal roving may have 1.25 turns per inch until the operator pieces up the broken end. He will often add one to two more turns per inch to the roving with which he threads the flyer. This highly twisted section is from 12 to 20 inches in length and will show up in many yards of spun yarn.

Neps and slubs usually account for approximately 25 per cent of fabric imperfections. If a fabric contains several types of fibers and is cross-dyed, the neps and slubs show up very plainly. They also reduce coning and winding efficiency and are responsible for a large number of loom stops. Neps can be formed and fed into the fiber mass or fiber strand by every textile processing machine. Excessive and improper opening will partly nep rayon fibers, and the picker and card will finish the nepping process. Regular cotton vertical openers and C. O. B. machines have a tendency to roll the fibers and tangle them in such a way that it is impossible for the card to separate and straighten them out. If damp fibers are fed to the pickers, they will nep.

Rough surfaces in conveyor lines often catch the fibers and build up bunches. The bunches become heavy and fall back into the fibers being drawn through the pipe. These bunches are composed of fibers tangled by the air draft and are in such a snarled condition that they can never be carded properly. Condensers, spiked lifting aprons and parts of the picker will collect similar bunches. They also build up until they cannot support their own weight and then fall into the fiber being processed. This tangled fiber mass will be torn apart by the pickers and card, breaking many fibers, and allowing small tangled groups to be fed into the sliver. Conveyor lines, condensers and pickers should be inspected and cleaned at regular intervals. The labor cost will pay for itself many times.

All types of cards will nep rayon fibers if they are overloaded and if they are not kept clean, sharp and in good mechanical condition. The licker-in should be in good condition. If the licker-in loads, unopened and roller stock will be delivered to the cylinder. The action of the flats and cylinder or the workers and strippers cannot card the bunches of fibers, and neps are produced. A card processing the average blend of 100 per cent lap should be stripped every four hours. If the cylinder is filled, proper carding cannot take place. When the carding rate is 16 to 18 pounds per hour this is very important, because at this speed the flat card is reaching its maximum capacity with the present types of rayon staple. It is suggested that the supervisor watch the webs carefully for improper carding.

Thick and thin sections, filling bands and uneven fiber distribution usually accounts for yarn imperfections. Thick and thin sections in a yarn usually caused by uneven drafting or imperfect roving. Spring bottom rolls produce thick and thin places, and this mechanical condition is often found in the older mills. Worn or imperfect rings, bad bobbins, slack drives and insufficient lubrication also contribute to uneven yarns.

If the roving is stretched in the creel or by excessive tension at the front, uneven yarns will result. Care should be taken to see that the twist in the roving is neither too high nor too low. Either extreme will lower the yarn quality. Roving produced from the coarser blends will require more twist than blends made from the finer denier staples.

Uneven Fiber Distribution

Uneven fiber distribution causes uneven drafting and low efficiency on the fly frames and in spinning. Many blends contain 1.5, 3.0 and 5.0 denier fibers. Such a combination does not draft as evenly as a 100 per cent, 3.0 denier blend. The doubling and drafting do not aid the fiber distribution in short lengths or yarn, and this condition must be watched if the finished fabric is to be smooth and shadow free. In other words, a yarn, especially the wool blends, will have more uniform distribution in short sections if the doubling and drafting operations are reduced to a minimum. This selective drafting or grouping is one of the problems facing the industry, as the blends need the additional doubling to maintain a uniform mix from bobbin to bobbin when the fabric is woven.

Filling bands will be found in a cross-dyed fabric if the fiber blend is not uniform. This type of imperfection is

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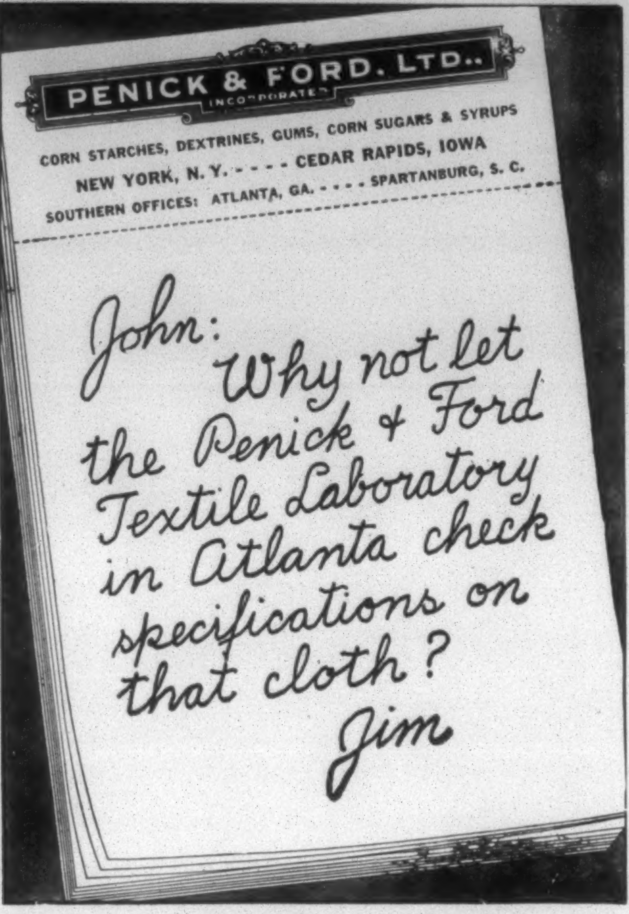
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very serious, as it is easily seen even though the error may be small. It has been pointed out before that filling bands will result in a 50-50 blend of acetate and viscose if the acetate or viscose content varies more than 0.2 per cent from bobbin when woven on a single shuttle loom. Until a perfect mechanical automatic blender is developed, the blending problem will require every possible caution.

O.P.A. Decontrols Many Textile Machines

Suspension from price control of numerous types of textile machinery has been effected by the Office of Price Administration under Amendment 13 to SO-129. Types of textile machinery decontrolled include the following: Fiber to fabric machinery—cleaning and opening machinery for cotton, wool and other fabrics; carding machinery; combing and drawing frames; spinning and twisting machinery; yarn preparation machinery; synthetic fiber spinning machines; machinery for filament extrusion; staple fiber spinning machinery. Fabric machinery—looms, knitting machines, braiding, lace, and embroidering machines. Bleaching, dyeing and finishing machines—bleaching, dyeing, cloth printing, starching, dry-finishing, wet-finishing, cloth handling machines.

All other types of textile machinery are still subject to MPR-136, machine, parts and industrial equipment order, to which revisions have been made for those types of machinery still under price control. O.P.A. also has announced that those manufacturers of power-driven tools not covered by the suspension order will be given a price increase of 20 per cent over their Oct. 1, 1941, prices.

Bell Scores Special Privilege Taxes

Municipal authorities of the City of New York have gone far beyond other communities in the United States toward the nullification of the spirit, if not the text, of interstate commerce statutes, in seeking to levy harmful special privilege taxes within and without the state, W. Ray Bell, president of the Association of Cotton Textile Merchants of New York, told the financial group of the association at a dinner recently. Mr. Bell commended the group for its opposition to "additional unwise taxes and the distortion in the application of current laws." Harold Elliot of Wellington Sears Co., New York, chairman of the group, presided. Dwight W. Michener, associate director of research of the Chase National Bank, addressed the group on the loss of economic morale in the nation's working force during the war, and Thomas Jefferson Miley, secretary of the Commerce and Industry Association of New York, discussed the position of minority groups in state legislative activities.

Striking out at current legislative proposals which would lay a tax not only on business firms engaged in transactions in the city and state, but also at views of the city officials that levies might also be made upon companies which in their business in New York City engage in the distribution of goods from sources outside New York to those both within and outside the state, Mr. Bell declared that such "interferences with the free movement of goods in interstate commerce are obnoxious. They are particularly so when they occur in the city of our business residence, and are particularly harmful to the operation of the great textile markets which your firms and their predecessors have established and maintained over so many years."

Thompson Heads Atlantic Cotton Association

W. A. Thompson of Charlotte was elected president of the Atlantic Cotton Association, succeeding John M. Little of Union, S. C., at the annual two-day convention of the group March 29-30 in Greenville, S. C. C. D. Tuller of Atlanta, Ga., was named vice-president; and W. D. Lawson of Gastonia, N. C., and M. G.. Heath of Atlanta were named directors. Other officers include J. M. Glover of Atlanta, vice-president and secretary, and F. G. Hill of Atlanta, treasurer.

The more than 100 cotton dealers from the Carolinas, Georgia, Virginia, Alabama and Florida attending the convention heard J. A. Shanklin, cotton specialist of North Carolina State College, Raleigh, extol the one-variety production of cotton. He pointed out that cotton was still a big money crop for the South and could be more so through the one-variety production plan. He also said that cotton plant breeders, co-operating with college agricultural experiment stations in Southern states, had developed seed stocks which had greatly improved the spinning quality of lint. "This factor is the most helpful development in the production of cotton as its growers seeks to meet sharp competition from synthetic fibers," he said. Cotton yields in North Carolina, where improvement of the quality of cotton has been stressed, have increased 36 per cent in the past six years, he told the group..

Shuttleless Loom May Be Shown Soon

The shuttleless loom, reported to have been perfected by Sulzer Bros., Ltd., of Winterthur, Switzerland, is expected to be unveiled to the trade in about three months. Heretofore, not more than a handful of people in the trade have seen the loom. The manufacturer has felt that if the loom was shown prematurely, damage through hasty and adverse comment might result because, even now, the loom is not ready for all-purpose weaving. The American concern now considering license rights is reported to be Warner & Swasey Co., Inc., which feels that the loom must be subjected to experiments under American conditions before it reveals its manufacturing, sales and distribution strategy.

Sulzer Bros., in constructing the new loom, has eliminated the shuttle by replacing it with a patented device termed a gripper. This gripper performs the functions of the shuttle and eliminates the bobbin. Use of the gripper will necessarily cause changes in winding procedures, because the yarn is fed into the loom from a large, rotating spool. The loom stands 40 inches high, has no superstructure, and working models are 60 inches and 130 inches long, though the loom may be made as long as desired and can weave a number of fabric widths simultaneousl.

Mrs. Dorothy Liebes of San Francisco, Cal., famous for her original work in weaving, takes the textile industry to task for its failure to support the International Textile Exhibit sponsored by the Woman's College of the University of North Carolina, in an article in a recent issue of *Collier's*. After indignantly condemning schools for not training textile designers for "the biggest business in the country," Mrs. Liebes says, "I was a judge at the International Textile Exhibit. The prizes were too small—around fifty dollars, while a designer can get a thousand dollars for designing a gas range. This exhibit is a worthy undertaking of the Greensboro institution. It should be supported by the textile industry."

A Complete Set of these Data Sheets will give your Maintenance Man Valuable hints. Previous Sheets will be sent upon request.

MAINTENANCE DATA SHEET NO. 4

CLAMPS FOR SCOTT TESTERS

If discrepancies still remain after correcting the Tester head, the difficulty may lie in the clamps.

On flat grip clamps for testing fabric, sheet metal or similar material, the gripping surfaces MUST be absolutely flat and parallel. Place a sheet of white paper and of very soft pencil carbon paper between the clamps, and close them tightly. If carbon is not deposited uniformly over the white paper it will indicate that the surfaces have become worn by testing hard material, or distorted by excessive pressure on the closing screw. Such clamps should be returned to the factory for resurfacing and realignment.

To determine parallelism of the long edge of the gripping surface: move the lower clamp down about 1"; measure the distance between the edges of the gripping surface at both ends. If not parallel, adjust the clamp which is out of line, by straightening the connection joining this clamp to the testing machine.

Cord, twine, wire or similar materials require drum-type clamps, of which the drum surface must be absolutely smooth, while the gripping surface of the clamps must apply uniform pressure throughout.

On wedge-type wire clamps, after considerable service the gripping surfaces become worn. Replacement inserts can be ordered, which are easily installed.

On drum-type wire clamps, (as the Jute Association wire clamp) the drum, eccentric roll and anvil should be replaced as soon as any amount of wear shows.

On all clamps, any surface subject to friction should be lubricated periodically, especially the hinge, screw thread and contact between screw and clamp body of fabric clamps, and the sliding wedge of wedge-type wire clamps.

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F.T.C. Calls Conference On Protein Fibers

The Federal Trade Commission has called a trade practice conference for the industry engaged in producing and marketing man-made protein base fibers and textiles or the products manufactured therefrom. Commissioner Lowell B. Mason will preside at the conference, which will be held in the Park Lane Hotel, New York, April 24, beginning at 10 a. m.

All persons, concerns or organizations engaged in producing or marketing man-made protein base fibers or products thereof are invited to attend or be represented at the conference.

The purpose of the conference is to consider and propose for establishment, subject to approval of the commission, fair trade practice rules to provide for recognition and approval of a generic name for man-made protein base fibers or filaments; for the proper identification of these fibers or filaments when used in whole or in part in yarn, thread, strands, fabric, and in textile or other products; and to provide other appropriate trade practice provisions respecting the marketing of such fibers and products.

Proceedings to establish trade practice rules were authorized by the commission at the request of producers and with the objective of assisting the industry to maintain high standards of fair competitive practices and to provide for protection of the public as well as business against misunderstanding, deception and unfair methods of competition.

After the New York conference and before final approval is given to rules, another hearing will be held, on a date to be announced later, to consider a draft of proposed rules. At this second hearing all interested parties, including consumers, will be afforded an opportunity to present such suggestions or amendments as they may desire to submit.

Controls Important To Continuous Bleaching

Electronic and other new improved industrial instruments will become major factors in the successful operation of continuous bleaching systems now being installed in several of the larger textile mills of the country, according to Karl Selden, Jr., textile sales engineer for the Brown Instrument Division of Minneapolis-Honeywell Regulator Co.

Pilot plants and research laboratories, says Mr. Selden, have already employed such industrial instruments for successfully recording and controlling temperatures and other variables at numerous points in the continuous bleaching system which, he added, is replacing former kier or batch bleaching methods. Basically, each machine in the continuous bleaching range has its own automatic control system which, in the aggregate, makes up the total or group instrumentation. The various points of control and the instruments normally recommended for obtaining higher quality products and more efficient and economical operation are described by the Brown company sales engineer as follows:

Washer Temperature Control—Automatic temperature control is installed on each washer. If the temperature of the water rises above a specific point, excessive steam consumption results, in an amount of about ten per cent for each ten degrees (F.) rise in temperature. If the washer temperature falls below a specific level the quality of the bleach is unfavorably affected.

Washer Water Flow Control—It is recommended that washer water flow should be automatically controlled. Tests indicate that under manual control the quantities of water vary from day to day on a machine that is washing identical cloth. It is also observed that these variations are usually on the high side with respect to minimum requirements, demanding more steam for water heating, resulting in excessive steam consumption. Since washers use more steam than any other bleaching equipment the importance of economy at this stage of the process is both obvious and important. The control of water flow is accomplished by a Brown electric recording flow controller. The rate of flow is adjustable by an operator who can set the control adjustment on the instrument. This feature provides flexibility for required changes due to cloth weight from run to run.

Saturators—Temperature control is applied to the caustic and peroxide saturators. Saturator temperature control, vital to steam and chemical economy and product quality, must be maintained for maximum efficiency of each subsequent storage box. The temperature of each saturator is measured, recorded and controlled by Brown recording ElectroniK potentiometer controllers.

Storage Boxes (J-Boxes)—In two continuous bleaching systems the storage box is known as the J-Box. Each storage box is equipped with a recording steam flow controller. The control point of this instrument is automatically set by means of a recording-indicating ElectroniK potentiometer controller, connected to an optional number of thermocouples. These are installed at well distributed points in the wall of each storage box. In one type of J-Box, one of the storage box thermocouples is installed at a point above the steam chest. The temperature of the entering cloth is measured by this thermocouple and is transmitted to the controlling instrument where it automatically regulates steam flow, compensating for cloth temperature changes. Other themocouples provide a means for securing check readings of cloth temperature at various locations in the storage box and temperature of entering steam.

Steam Flow Control—Studies have proved that to obtain maximum economy of operation in the entire range, and to provide a quantitative value to the demand of the system, it is essential to provide a check. This check is obtained with a Brown electric recording and integrating flow meter. The instrument is installed on the line supplying steam to the entire range. Where high steam pressures exist (approximately 40 pounds per square inch or over) a pressure reducing and desuperheating arrangement is available, comprising a Brown recording pressure controller and ElectroniK potentiometer.

Squeeze Roll Loading—Pneumatic squeeze roll loading is recommended. Uniformity of bleaching depends largely on uniform water and/or chemical content in the cloth, the content being provided by controlled squeezes pressure. The pressure of each set of rolls is measured by a Brown two-pen recording pressure gauge which records on a chart the pressure preceding and following each saturator. The operator periodically observes the chart recordings and can make any necessary adjustments by means of a manual valve. If desired, the control may be automatic by using a controlling type pressure gauge instead of a recording type. This instrument affords a constant reading and a permanent recording of squeeze roll operation while maintaining the necessary balance for good operating conditions.

General Equipment—Provision is made for shutting off steam and water flow when machines are stopped, preventing waste. For this an electro-pneumatic relay is de-energized

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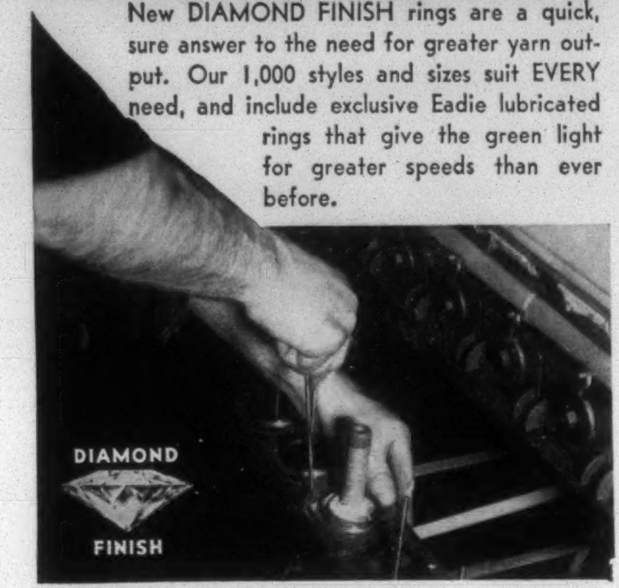
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by the stopping of the machine motor. The relay then regulates the air supply to the control mechanism in the controlling instrument which, in turn, moves the control valve to its closed or minimum open position. Control of cloth and steam temperatures are vital to efficient storage box operations. The success of continuous bleaching method depends largely upon the maintenance of proper cloth temperature and the economy of the system is based more upon automatic control than any other factor.

All-Wool Summer Clothing Predicted

The well-dressed man will soon be wearing all-wool suits to make life more tolerable in excessively hot weather, Dr. Donald H. Powers, director of textile research and development for Monsanto Chemical Co., predicted recently. Wool is ordinarily associated with warmth, Dr. Powers pointed out. But the same textile chemical that affords shrinkage control and long-lived trouser creases, he disclosed, also is capable of imparting "extreme coolness" to woolen textiles.

This is because it stabilizes woolen fibers to the point where it is possible to weave an extremely thin, yet highly serviceable fabric, and at the same time it gives smoothness and fastness in lieu of wool's conventional hill-and-valley contours. Up to now, wool has been considered too fragile to meet both the requirements of serviceability and the requirements of thinness, porosity and flatness demanded by summer clothing. Dr. Powers is confident his new textile chemical, Resloom, will enable wool to do the job.

Few, if any, Resloom-treated summer garments are expected to reach retail outlets in 1946, a year in which almost any kind of suit finds a ready buyer. But starting in the summer of 1947, he believes, it will take a brave man to face 100 degrees in the shade unless clad in woolens. Dr. Powers also predicted that Resloom's same stabilizing influences will enable wool processors to make winter suits of lighter weight and greater warmth. This will involve increasing thickness dimension of the cloth and decreasing the amount of wool actually used without sacrifice of strength, style and serviceability characteristics.

Resloom, as previously announced, is a melamine-formaldehyde resin used to impregnate the tiny hollows of individual fibers, imparting shrinkage control, stability, wrinkle resistance and crease retention. It can be applied on existing mill equipment and does not change the feel and appearance of the textile.

Dr. Powers disclosed that in recent months scientific evidence has accumulated to strongly suggest that Resloom, instead of merely modifying wool, creates an entirely new and vastly superior fiber—more different from wool than rayon is from cotton. "We retain and improve the physical properties of wool, but under the microscope and in the reaction kettles we see a fiber whose chemical composition appears to be wholly dissimilar to that of natural wool," he declared. "We think that it is a new protein, and we believe its chemistry merits further study." This does not hold true when Resloom is applied to rayon and cotton, which, oddly enough, are the two fabrics on which greatest amounts of Resloom have been used in extensive mill trials that have been in progress since V-J Day.

Turning to cotton, Dr. Powers suggested that Resloom will make possible "a $30 cotton dress that is really worth

$30, and then some. "Never forget that cotton is this country's most valuable, most versatile and most widely used fiber. It combines economy with such highly desirable characteristics as strength, toughness and durability. Its only major shortcomings are lack of resilience and luster. Our studies thus far indicate that Resloom will enable cotton to go a long way toward overcoming these deficiencies. It not only affords a superior finish but it also makes possible a dress which does not bulge in the wrong places after it has been worn a few times."

It is in the control of wool shrinkage, Dr. Powers said, that textile chemists have scored some of their greatest gains in the last few months. For example, he suggested, a Resloom-treated wool flannel shirt has been made that shrank less than 1½ per cent after five trips through a soap and water laundry. Under the same punishment an untreated companion shirt shriveled up to about half its original size. Almost equally spectacular have been figures yielded by tests on such articles as blankets, sweaters, socks and other woolens. In each instance, the shrinkage factor has been whittled to an extreme that might be termed an inconsequential minimum.

Dr. Powers believes that the consumer will ultimately be able to buy treated textiles cheaper than untreated textiles. In many milling operations, shrinkage losses up to ten per cent are suffered before the textile leaves the mill. "It seems reasonable to assume that by cutting these losses to about one per cent the operator can more than pay the cost of the chemical treatment, and at the same time pass on to the consumer a far more valuable piece of cloth."

Report Given on Building Materials

Improvement in production of major construction materials is expected, following a general downward trend at the close of 1945, according to a recent *Report on Construction and Construction Materials,* prepared by the construction division, Department of Commerce.

Construction costs and prices of construction materials continued to rise in December, with prices of materials reaching their highest level in 25 years, the report states. Pointing out that December production declines were in general in line with normal seasonal trends, due in part to the Christmas holidays, the report summarized the supply situation for construction materials and components at the beginning of 1946. Data for key materials follows:

STEEL: January production was curtailed by the strike and is expected to show only about 60 per cent of capacity as compared with 75 per cent in December and 79 per cent in November. *Sheet and strip* are the tightest of all steel shapes and are expected to continue in short supply through the first half of 1946.

LUMBER: December production declined to the lowest monthly level in ten years. Excess of demand over supply continues to keep both mill and distributors stocks at an all-time low. *Millwork:* Unfilled orders on *millwork* far exceed production which is hampered by shortages of manpower and materials. *Soft plywood* continues in short supply chiefly because of log shortages. *Hardwood flooring* production is retarded by shortages of dry lumber and lack of experienced labor. Unfilled orders in producers' hands equal to six to ten months' output at the present rate.

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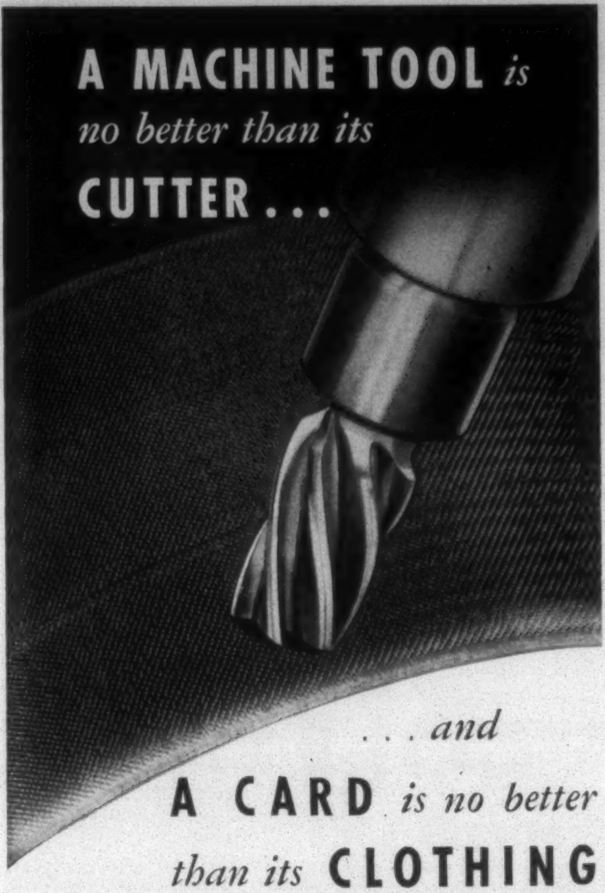

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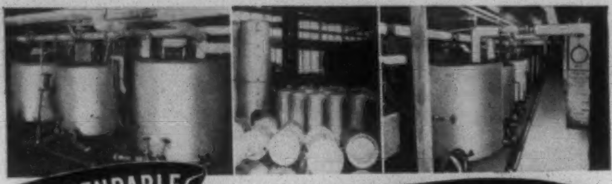

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facing tile showed production losses in December, in contrast with sharp gains in the two previous months. For most clay products, demand continues heavy. Demand for *brick (common and face)* represents about 3½ months production at the present rate. Total 1945 shipments of 2.4 billion brick represented an 18 per cent increase over 1944 shipments. Stocks at the close of 1945 were at an all-time low and were only 15 per cent of normal. Production of *structural clay tile* in 1945 was three per cent greater than that of 1944 but was well below the levels reached in 1941-43. Stocks have declined progressively since 1941 to a low of 12 per cent of normal. *Clay sewer pipe* production and shipments declined in December, following the pattern for most other clay products. Stocks at the end of 1945 were 60 per cent lower than at the end of 1944 and 97 per cent lower than at the end of 1943 and 1942.

PORTLAND CEMENT: December, 1945, production was about 32 per cent greater than that for December, 1944, and output in 1946 is expected to amount to from 140 to 145 million barrells. December, 1945, production exceeded shipments, resulting in a substantial increase in stocks.

ASPHALT ROOFING, SIDING, FELTS: Backlog of unfilled orders continues large, amounting to from nine to 12 weeks' production. Heaviest demand is for saturated felts. December shipments of prepared roofing were the lowest in the past four years.

GYPSUM BOARD AND LATH: Gypsum board shipments in December were 18 million squares less than those of November, due to the holidays and production loss in two strike-bound Pacific Coast plants. Shipments for the year 1945 were practically the same as for 1944 (2.1 billion square feet). Supply of gypsum lath improved considerably in the fourth quarter of the year.

CONCRETE BUILDING BLOCKS: Unfilled orders amount to more than double the current production rate. Inventories at the end of 1945 were only 50 per cent of normal. If sufficient manpower is available, 1946 requirements can be met.

METAL BUILDING PRODUCTS: Volume of production is contingent upon available steel inventories. *Metal insect screen cloth* is expected to continue in short supply through 1946. *Steel windows* are not in stock. Production is limited to inventories of basic shapes. *Nails* are in very short supply, with no improvement expected until the second quarter of 1946.

Jap Rayon Capacity Is Estimated

The maximum potential productive capacity of the Japanese rayon producing industry is 354 million pounds a year, 120 million pounds of which is rayon staple and the remainder yarn, according to a report by H. Wickliffe Rose, assistant to the president of American Viscose Corp. and chairman of the Textile Research Institute, who was a member of the joint State-War Department mission to study the Japanese textile industry. The bomb damage to the Japanese rayon industry was nominal, and the cotton industry suffered to a much greater extent in this respect, Mr. Rose reported. Regarding the nature and equipment of the Japanese rayon industry, he said that some of the plants were excellent, some fairly good and some very poor. Of the maximum potential productive capacity of 354 million pounds a year, Japan is currently producing rayon at the rate of 1,000,000 pounds a month or 12,000,000 pounds a year.

Floor Maintenance Stressed At Meeting

Problems confronting textile mill operators in the maintenance of clean and safe floors held the interest of a group of Southern textile men, March 29 and 30, in a series of conferences. The conferences, under the auspices of the G. H. Tennant Co. of Minneapolis, Minn., was conducted at Greensboro, N. C., with sessions both at King Cotton Hotel and Sedgefield Inn.

Guest speakers included George Schaffert and Clifford Troutman of Burlington Mills Corp., Greensboro, and James Copland of the Copland Fabrics Corp., Burlington, N. C. It was pointed out that maintenance of clean, safe floors was one of the most important problems facing mill operators. Summarized, the discussion of the conference included: (1) the preservative and maintenance of hard-to-get maple flooring with dry cleaning methods that will retain a hard, safe finish, avoiding the use of soap and water which gradually destroys the wood fibres; (2) the methods of cleaning oily, dirt-filled mill floors to bring the surfaces back to their original state—clean, bright and safe to walk on; (3) the floor problems of mills using synthetic fibers where extra care must be exercised to prevent water damage to the finished products; and (4) the treatment of floors marred and dangerous with imbedded traveler rings that make walking hazardous.

A floor machine demonstration at a Greensboro, N. C., textile plant aroused much interest during a conference conducted March 29 and 30 by the G. H. Tennant Co. of Minneapolis, Minn. Examining results of the demonstration are three officials of the maintenance machinery concern: A. S. Mabusth, district manager; O. C. Hognander, vice-president and sales manager; and W. A. Anderson, vice-president and chief engineer.

Tennant representatives gave demonstrations of their floor machines to show how they handled the problems under discussion. A new attachment was demonstrated that removed traveler rings from mill floors quickly and efficiently. The renovated floor area was treated with a special sealing solution and then burnished with steel wool rolls that left a hard surface, resistant to further penetration by traveler particles as well as oil and dirt. Earlier sessions of the floor maintenance conference included sales meetings of the Tennant representatives and tours of textile plants around Greensboro.

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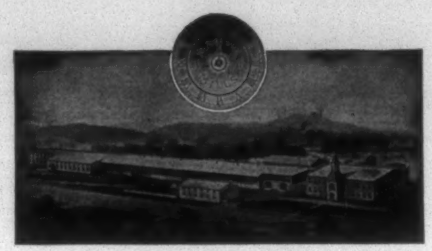

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POSITION WANTED—Master Mechanic, 12 years' experience, wishes position in Southern States. Best of references. Welcome interviews. Write "Southern States," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

OVERSEER OF WEAVING would like to have job with some reliable mill in Alabama or Georgia. Now employed but would like to make a change for good reason. 22 years' experience in weaving department; also experienced on dobby and all kinds of plain weaving; capable of handling weave room of large capacity. Can give best of recommendations. Sober and reliable. Age 41; married. Would consider other locations than Alabama and Georgia. Write "Reliable," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

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2—Saco-Lowell 4½-inch Ring, 6-inch Gauge, Tape Drive Twisters, 100 spindles each.
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Care Box 286, New York 8, N. Y.

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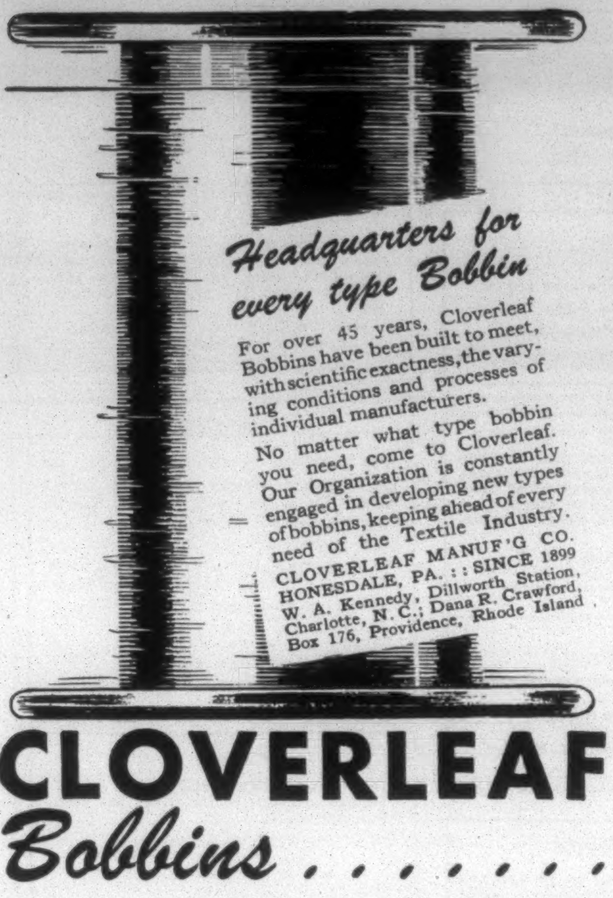
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Cluett, Peabody Plans Research Laboratory

Plans are virtually complete for a modern research laboratory to be erected in Troy, N. Y., at a total cost, including equipment, of $600,000, it has been announced by C. R. Palmer, president of Cluett, Peabody & Co., Inc., following the company's annual meeting at Troy April 3. At the same time, he disclosed that the company is planning further modernization an dexpansion of its existing facilities in Troy and is confident that the expected developments of its research, which will be carried out on a greater scale in the new laboratory, will result in the need for further plant additions and will enable the company to employ more persons from this area.

The building will house a complete research and development laboratory, under the direction of E. C. Pfeffer, Jr., company research manager. Mr. Pfeffer came to Cluett, Peabody & Co., Inc., to head up its research division in 1942. Prior to that, he had been connected with the research department of the Continental Can Co. He is a graduate of Massachusetts Institute of Technology. According to Mr. Palmer, it is anticipated that this laboratory will double the company's present complement of scientific research people who have been specifically trained in the fields of chemistry, engineering, and physics, as applied to textiles and textile processes.

The laboratory building is expected to be started as soon as current uncertainties in the construction industry make it possible. It will consist of a two and one-half story main section, 190 by 50 feet, which will house the administrative offices and in which the company will carry on full-scale laboratory research. In addition, a 30 by 100-foot one-story section to the rear of the main building will house a power plant and boiler rooms. To the rear of this, another single story building, 100 by 175 feet, will contain experimental machine shops, process development laboratories, and pilot plants where the research work completed in the laboratories will be carried out on a pilot plant basis prior to its commercial application in large-scale plant operations.

Cluett, Peabody's enlarged program of industrial research will be carried out along several lines. In the main building, the company will engage in chemical process research. Included under this general heading will be scientific studies leading to the development of new chemical fabric processes as well as technical developments. Typical of such developments will be scientific projects designed to make possible the use of fused seams, the improvements in plastics, and the development of improved dry fused collars. Here also will be carried on investigations and studies of new chemical treatments and processes applicable to use in the textile industry.

"The textile research section of the new laboratory will deal with the development of new and improved fabrics for the products manufactured by Cluett, Peabody," Mr. Palmer said. "Here scientists will investigate the value and suitability of new textile materials which have possible uses in the company's products. Special research projects to be carried out in this section will include studies of non-woven fabrics, non-shrinking thread, and electrostatic control of textile fibers. The laboratory's experimental process section will be tied in closely with the other research sections of the laboratory. Its functions will be the development of special automatic equipment which will tend to promote more efficient manufacturing operations. This section will design a variety of new equipment and will investigate and study new manufacturing methods and processes. For example, it will work on the development of new methods of spinning yarn."

One of the most important divisions of the new laboratory will be the fundamental research section, where the company's scientists will carry on important research on new and improved synthetic fibers. This section will not only present synthetic fibers but will also engage in pure research which may lead ultimately to the development of entirely new synthetic fibers which will have fields of usefulness in the production of many types of textiles.

Mr. Palmer said that since 1942 the company's research work has expanded substantially, and the new research laboratory will make it possible to engage in this work on a scale unprecedented in the industry. "Already Cluett, Peabody has accomplished much in research," he explained. "Our method of compressive shrinkage marked an epoch in the finishing of cotton goods labeled Sanforized, and we have contributed well-known developments in manufacturing, bleaching, and processing cloth."

Currently the company's present research laboratories in Troy are in the final stages of the development of a new chemical method of rayon stabilization, which promises to be as revolutionary in the elimination of rayon shrinkage as Sanforized was in the elimination of cotton shrinkage. Research scientists are also at work on the development of a new process for the stabilization of wool and have engaged in preliminary fundamental research into new synthetic fibers. In connection with the expansion of Cluett, Peabody's research activities, Mr. Palmer stated that the research objectives are many-fold, and will result in ever-improved products and lower costs for the consumer.

Fiberglas To Buy Huntingdon Plant

Owens-Corning Fiberglas Corp. has announced that the War Assets Administration has accepted its bid of $910,000 to purchase the plant at Huntington, Pa., which Fiberglas has operated under lease since 1943. Two months ago the Reconstruction Finance Corp. accepted the Fiberglas Corp.'s $650,000 bid to purchase a 35-acre industrial property in Kansas City, Kan. Fiberglas was to have begun manufacturing operations in the Kansas City area when the war ended.

Manufacturing equipment in the Huntington plant will be used to produce Fiberglas continuous filament yarns. Used in war production for industrial utility fabrics, these materials are being converted to such peacetime markets as decorative fabrics, electrical insulation, plastics reinforcement, and special purpose coated fabrics. The Kansas plant is being equipped to manufacture Fiberglas building insulation and roofing materials, pipe wrap used for protection against corrosion, industrial insulation, and equipment insulation, as well as fine glass fibers of a type newly developed. Other Fiberglas plants are located in Ashton, R. I., Burlington, N. J., and Newark, Ohio.

The first shipments of raw cotton from the United States to Germany since the war recently were made. The consignment, 10,000 tons, will be used to make bags urgently needed for flour and to manufacture workmen's clothing. The cotton will be available for all four zones of Germany, with the provision that at least half of the finished products be made available for export.

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Advice Sought In German Textile Probe

A memorandum from W. D. Appel, chief of textiles section, National Bureau of Standards, U. S. Department of Commerce, to investigators of the textile industry in Germany and executive officers of textile associations in the United States has been issued, soliciting "advice and specific suggestions" regarding future investigations of the German textile industry. "It has become evident," the memorandum states, "that additional investigations in certain special fields are needed and that copies of documents of interest to the industry should be acquired." The bureau has been requested to make recommendations on the following subjects:

(1) Machines and equipment which should be sent to the U. S. for demonstration purposes.

(2) Targets of special interest where detailed information on the actual plant operation, machinery and layout should be obtained on the spot by engineers, draftsmen, etc.

(3) The composition of adequate teams for the investigation of these targets. Salary and travel expenses of the members of these teams probably will have to be paid by their employers. The investigators will receive W.O.C. appointments and it will be understood that their investigations will be made in behalf of the industry as a whole.

(4) The names of superior young American technologists and scientists to lead, and the names of native German technologists to serve on, screening and microfilming teams for the recording of important documents in German mills and research laboratories. These technologists would be employees of the U. S. Government.

(5) List of plants in order of importance which offer the most attractive prospects for the work outlined in (4).

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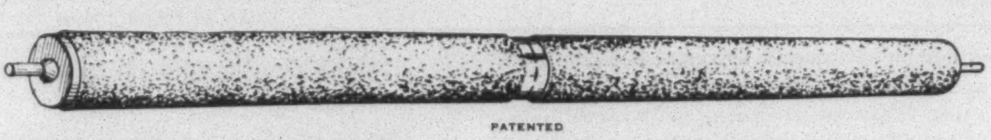
Cotton and Rayon Fabric Processing Increases

A total of 1,923 million linear yards of cotton and rayon woven fabric was bleached, dyed, or printed and finished in the United States during the fourth quarter of 1945, according to a report released March 29 by the Bureau of the Census. Accordingly, this represents eight per cent more than the 1,779 million yards finished in the third quarter of 1945 but seven per cent less than in the fourth quarter of 1944. The summary table in the report indicates that 1,549 million yards of cotton fabric were processed during the fourth quarter of 1945, an increase of nine per cent over the third quarter but seven per cent less than in the fourth quarter of 1944. The 374 million yards of rayon fabric processed during the fourth quarter of 1945 represents an increase of seven per cent over the third quarter, but is nine per cent less than in the fourth quarter of 1944.

U. S. May Acquire Jap Cotton Trade

American cotton shippers may get the major portion of Japanese purchases expected to total more than 1,000,000 bales a year under an agreement reportedly under consideration by the Allied Control Commission. Indications are that the United States may be assigned about 65 per cent of import quotas. State Department officials have been reported to be endeavoring to effect an agreement on the sale of cotton to the Japanese in the hope that its announcement might soften some Southern opposition that has arisen in the Senate to the proposed $3,750,000,000 British loan.

Under the proposed agreement, it was reported that Japanese import quotas would be set on a basis of sales to that country in the 25-year period before the war. American



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negotiators were pushing this plan as an alternative suggestion to a British proposal that the base cover only the five years before the outbreak of the war. During that period India bartered cotton to Japan, while the United States was virtually frozen out of the market.

Yarn Treatment Increases Tensile Strength

Science has found a way to increase the tensile strength of cotton yarns up to 40 per cent, Dr. Donald H. Powers of Boston, director of textile research and development for Monsanto Chemical Co., said at Winston-Salem, N. C., April 6 in an address before the Piedmont Section, American Association of Textile Chemists and Colorists. The improvement is effected through mill application of a special submicroscopic collodial silica called Syton, which the company originally announced as a chemical to make sheer stockings run-resistant and to take the shine off serge.

"For nearly two years a careful study has been made on the effect of high polymers on the spinning of cotton," said Dr. Powers. "Out of this research by the National Cotton Council has come the finding that Syton is truly unique in its action. When applied to cotton sliver in concentration of one to three per cent, the inter-fiber friction was increased and it was possible to increase the tensile strength up to 40 per cent and to decrease the twist as much as 40 per cent."

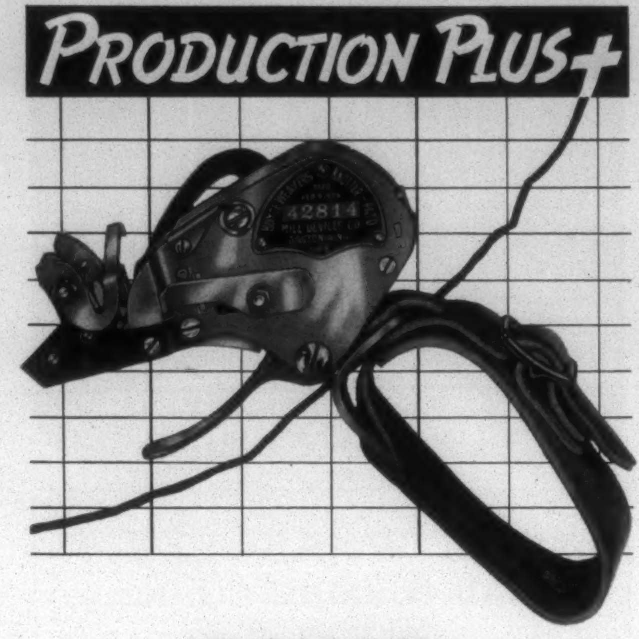
Dr. Powers also stated that modified melamine resins have been developed which can be applied in extremely high concentration to cottons, rayons and wools to impart improved crush resistance and resilience without embrittlement. "This opens up the possibility of crushproof cottons, extremely resilient and soft rayons and resilient, washable woolens and worsteds," he continued. "With each fiber certain constructions and twists respond better to resin treatment, and it is an important problem to select the best-adapted fabrics."

The one-day meeting at the Robert E. Lee Hotel was attended by a large number of delegates, and closed with a banquet session in the evening.

Student Textile Publication Is Revived

Students of the North Carolina State College school of textiles, Raleigh, have resumed publication of their journal, *Textile Forum.* First published in 1942, the journal attained national recognition as one of the leading magazines of its kind in the textile field. Its publication was suspended in 1943 due to the wartime publishing difficulties. The present issue, containing 32 pages, carries articles by Prof. W. E. Shinn, Dr. F. T. Pierce and Prof. Elliot Grover. The journal presents articles of particular interest to those in the trade, including recent developments in research, and activities at the school of textiles. Siegfried Wallner of Jacksonville, Tex., is editor; Mario Cohen of Miami Beach, Fla., business manager; and James J. West of Charlotte, circulation manager.

Dr. F. C. Toy, head of the Shirley Institute of Manchester, Eng., is currently engaged in a tour of Southern and Western states to visit a number of research organizations, such as the Southern Research Laboratory. In Washington, Dr. Toy visited the research and development section of the Army Quartermaster Corps and the Bureau of Standards.



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Figures Show Rayon Production Increase

Domestic rayon shipments during March of 75,300,000 pounds were 19 per cent over the February level, states *Rayon Organon*, published by Textile Economics Bureau, Inc. For the first three months of the current year, rayon deliveries totaled 208,500,000 pounds, an increase of 11 per cent over the first quarter 1945 shipments of 187,200,000 pounds. Deliveries of rayon by process in March, together with the percentage change from March, 1945, were as follows: Viscose-cupra filament yarn—42,700,000 pounds, plus 13 per cent; acetate filament yarn—15,800,000 pounds, plus five per cent; and rayon staple fiber—16,800,000 pounds, plus 23 per cent. Producers' stocks of rayon at the end of March aggregated 11,300,000 pounds, a decrease of 19 per cent from the 13,900,000-pound stock held at the end of February. The principal decline was in staple fiber stocks which were reduced from 4,000,000 pounds to 2,000,000 pounds.

In reviewing cotton, rayon, and wool broad woven fabric production for the period 1937-1945, the *Organon* states that the total three fiber fabric output rose to a peak of 13.3 billion yards in 1942, a 32 per cent increase over the average annual 1937-1939 production of just over ten billion yards. Thereafter, production declined and by 1945 the broad woven fabric output amounted to 10.8 billion yards, a figure just 7½ per cent above the pre-war average.

With respect to tire fabric and tire cord production during the past nine years, the publication points out that despite gas rationing and the consequent saving of civilian tires during the war, production of tire fabric and cord increased to a record level of 465 million pounds in 1945, an increase of 75 per cent over the average 1937-1939 annual output. The use of rayon and nylon by the tire fabric and cord industry has increased from a nominal quantity in 1937 to 39 per cent of the record 1945 total.

Many Mills Using Electric Industrial Trucks

A total of 133 textile plants are now using a total of 476 electric industrial trucks to solve their material handling problems, it is revealed in a survey made by the Electric Industrial Truck Association of Chicago. The survey shows that the textile industry ranks 13th among the nation's users of electric trucks, excluding government facilities. As of Dec. 31, 1945, a total of 34,802 electric industrial trucks were being used in some 5,000 plants throughout the country. It is reported that battery-powered trucks are specified in the textile industry because of their maneuverability, ability to handle heavy loads, low operating and maintenance costs, and the fact that such equipment can be built of spark-enclosed construction for use in areas where combustible goods are stored or manufactured.

Accurate Labor Cost Figures Stressed

More accurate computing of labor costs in the manufacture of cotton textiles is urged in a pamphlet entitled, *Cotton Textile Costs*, just issued by the Cotton-Textile Institute, Inc. The pamphlet points out that operating conditions require far more than casual reference to the funds drawn to meet a payroll and that the mere calculation of an aggregate average labor cost per unit produced, based upon the amount of payroll and quantity of production, is of dubious value. It explains that the labor cost applicable to individual products has become complicated in recent years by the addition of new forms of expense based upon wage payments.

"These new elements," according to the institute, "are overtime and shift premiums, guaranteed minimum wages, holiday and vacation pay and other forms of payments included directly in the payroll, as well as those usually computed at percentages thereof, such as social security taxes, accident and health insurance, etc. While these have been gradually thrust upon industry, they have reached such an aggregate that they can no longer be looked upon as overhead expense only. Instead, they must be directly identified as a part of labor cost. Under these conditions, current payrolls do not reflect the full labor cost of the products nor do the wage rates provide an accurate index since even piecework wage payments do not provide their oldtime accuracy."

The pamphlet describes in detail how to draft a payroll budget consisting of an appraisal of the labor required to operate a given plant at the planned level of operation with determination of the number of employees and work hours needed in each occupational group. It also shows how to list the nature of the tasks, provide identification at the cost centers at which they are absorbed, record the hourly and piecework wage rates and thus enable the computation of a predetermined payroll.

American Viscose Issues Booklet for Veterans

The policy of American Viscose Corp. with regard to returned service men and women is explained in a booklet, *Welcome Home, Veterans,* which is being distributed to all members of the company's personnel who served in World War II. William C. Appleton, president, in a foreword salutes A. V. C. veterans, stating that the corporation "definitely regards its veterans as an asset to the organization during the highly competitive era ahead." The company's policies are explained under such chapter headings as "Your Job and Job Rights," "Vocational Rehabilitation," "Leave of Absence for Educational Purposes," and "Veterans' Assistance."

Fiberglas Used for Floral Ribbons

Originally conceived as a replacement for rayon yarn, Fiberglas continuous filament yarn of a type used in weaving decorative fabrics, has been woven by Brauch Bros., Buffalo, N. Y., into floral ribbons. The Fiberglas yarns are composed of filaments which, basically, are microscopically fine, solid glass rods. The filaments cannot absorb moisture and, therefore, filaments, yarn and ribbon are unaffected by humidity conditions. This property enables Fiberglas ribbons to retain their crisp freshness during and after their stay in humid cabinets and refrigerated compartments in which floral tributes are customarily stored for varying periods prior to delivery.

Britain Holds To Cotton-Buying Policy

Britain's wartime system of centralized buying of raw cotton by a government commission will be continued, to result in the permanent closure of the large Liverpool futures market through which Britain's supplies of cotton privately bought flowed before the war. Sir Stafford Cripps, president of the Board of Trade, said the government will establish a "permanent cotton purchasing commission working in close contact with the spinning industry."

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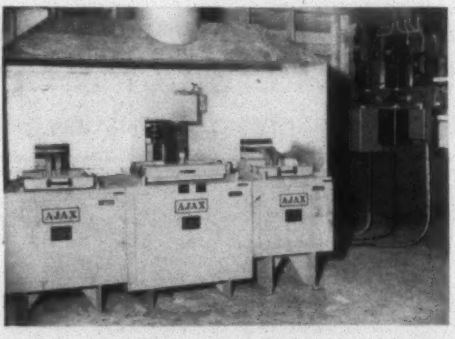

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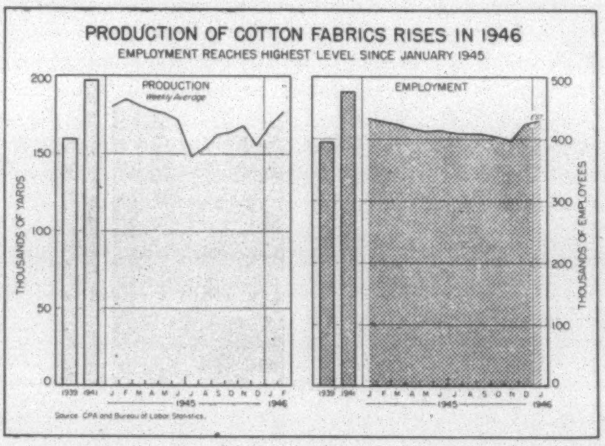
Cotton Goods Market

The steadily increasing price of cotton continues to concern New York's Worth Street market. Some sections of the trade are watching this situation closely with predictions heard on all sides that unless this upward trend is stopped, the market will soon find itself right back where it was before O.P.A. granted increased ceilings. Inevitably, this would mean another long, drawn out period of marking time and only selling a few weeks ahead, it is said, while the industry petitioned the government for a further price change in order to alter this situation. There are some firms that already are selling cautiously because of this threatening cotton picture, it is reported in the gray goods market.

Some Worth Street houses are considering the advisibility of selling their Column 4 and 5 set-asides on osnaburgs and certain sheeting numbers under M-317A, entirely in the gray, instead of releasing them 80 per cent gray as on osnaburgs and 75 per cent for sheetings, as that order directs it is said in the gray goods market. The loss of the five per cent incentive premium, plus the three per cent that would have to be deducted on those portions sold finished, is the factor that these selling firms and their mills are now considering, it is reported by observers.


PRODUCTION OF COTTON FABRICS RISES IN 1946
EMPLOYMENT REACHES HIGHEST LEVEL SINCE JANUARY 1945

Source: CPA and Bureau of Labor Statistics.

With many firms in Worth Street just about completing their work on allocating goods against the many M-317A set-asides and laying out sales schedules for the next three months, market circles look for those organizations that have not as yet started selling this quarterly period to do so at any time now. However, whether selling will be done across the board is a matter of individual house policy, some firms reporting an intention not to sell more than a month ahead for the present.

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Cotton Yarns Market

Producers' maximum prices for carded cotton yarns have been increased by three-fourths of a cent to 1½ cents a pound by the Office of Price Administration. This action was taken in Amendment 17 to S.O.-131. The price increase, effective April 4, is not expected by O.P.A. to have any perceptible effect on the retail prices of yarn goods or clothing. Under the new pricing, maximum prices for band A producers (those who qualify for higher prices by paying higher wages) are increased from three-fourths of a cent to 1½ cents per pound, depending upon count and ply. Band B producers receive a uniform increase of three-fourths of a cent per pound for all counts and ply. These increases are the result of a recalculation, requested by the industry, of the cost factors involved in producing carded cotton yarn.

It is noted in the yarn trade that this newest price adjustment again moves carded yarn closer to like counts in the combed division. Distributors, therefore, reason that the logical development now seems to be for O.P.A. to extend additional ceiling assistance to the combed industry, though it is said there are no immediate prospect of such action. A common question being asked in the Philadelphia market is "What has happened to the colored yarn price revision?" This has been expected by the trade and was said to have been promised shortly after the new carded prices went into effect.

Production reports of several good-sized spinning establishments indicate that yarn output has been raised around ten to 15 per cent since the end of the fourth quarter, 1945. Trade spokesmen urge that such gains must not be discontinued until the actual release of production statistics for the fourth quarter, 1945. There has been considerable talk that facts and figures compared with the last quarter, would be worthless, the assumption being that production for the end of the old year had taken a tailspin. Consequently, originators of such views had to back water when Bureau of Census tabulations revealed that a slight increase in yarn output was realized in the fourth quarter of 1945, as compared with the third.

An export program of approximately three million pounds of cotton knitting yarn and approximately 2,500,000 pounds of cotton weaving yarn has been established for the second quarter of this year.

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Labor Act Violations Are Listed

One out of every two textile manufacturing establishments inspected during the 12 months ending June 30, 1945, is reported to have violated minimum wage or overtime provisions of the Fair Labor Standards Act. This high ratio of violations, despite the fact that the act has been in effect since 1938, is revealed in a special report on textile industry inspections released by the wage and hour and public contracts divisions, United States Department of Labor.

The report, based on inspections made in accordance with the divisions' policy of concentrating on complaint cases or making inspections where other reasons indicate violations may exist, shows that more than one out of every four textile manufacturers found in violation of the minimum wage or overtime provisions had failed to pay employees the minimum wage of 40 cents an hour. The violations disclosed by this partial inspection of the industry during the 12-month period reported made necessary the payment of more than $883,000 in back wages.

Dan River To Make Dye Method Available

Patent rights covering the process of continuous pigment vat dyeing have been granted to Glenn Womble of the research staff of Riverside & Dan River Cotton Mills, Inc., at Danville, Va., by the United States Patent Office. The number of the new patent is 2,396,908. In line with its policy of making the practical results of its research available to the whole textile industry, Dan River Mills will begin very shortly to grant licenses on this process.

The dyeing method covered by this patent was discovered, developed and perfected in Dan River laboratories and dyehouses by Mr. Womble after long experimentation. The necessity back of this discovery was the critical need of a vat dyeing process which would give the deep shades specified for Army cloth and at a rate of production that would quickly supply the great amount of cloth required to put the United States Army in the field. As this heavy demand began to develop it was apparent that the Army's needs could not be met with the old pigment-pad jig method. Dyers knew that the number of jigs in the country was wholly unequal to the task.

The new process was then brought to the commercial stage by Dan River Mills and the alertness of the industry to the value of the new process for war supply purposes resulted in a quick diffusion of its details, and of its use, throughout the industry.

Discussing the attitude of Dan River Mills toward the use of this process, H. M. Chase, director of research, said: "Because of its contract with the Federal Government by which Riverside & Dan River Cotton Mills, Inc., granted to the Federal Government 'an irrevocable, non-exclusive, non-transferrable and royalty free license to its processes of manufacture during the war period and for six months thereafter, Riverside & Dan River Cotton Mills, Inc., was pleased to see its continuous vat dyeing process used so generally for the speedy production of critical Army goods. The contract with the government provided that it should 'terminate on the date six months after the cessation of hostilities in all wars in which the United States is now engaged.' Accordingly, this government contract expired as of March 2, 1946, and the royalty-free arrangement came to an end. The result of this policy of permitting the royalty-free use of its processes for the benefit of the war effort was that hundreds of millions of yards of colth were delivered to the Army in the correct shades and at speeds that eclipsed all the old methods."

The new Dan River process yields many advantages over older methods, the more important being: (1) deep uniform shades are readily obtainable; (b) speed of production is high, running up to 150 yards a minute, thus cutting costs; (3) fastness properties are wholly comparable to those given by the slow and expensive pad-jig dyeing; (4) the dyestuffs, being in a dispersed state in water, may be salvaged, thus effecting savings; and (5) the over-all costs are considerably reduced below older methods.

The process is applicable to all types of cotton piece goods, to fabrics made of synthetic yarns and to mixed fabrics, and so may be said to have universal application. The exclusive and essential step in this process is what might be called the drying stage. This stage follows immediately after the application of the vat pigment. It is regarded as the very heart of the process, assuring results that are not otherwise obtainable.

The operating steps may be briefly summarized as follows: the fabric passes through a padder where the vat pigments are applied, then is squeezed through rolls and passes through a dryer where it is uniformly dried; from the dryer the cloth passes on to the bath of reducing and dissolving chemicals, and thence through one or more booster boxes, very little time being required to develop the shade; after rinsing, oxidation, a soaping if necessary and a final rinsing, the operation is complete.

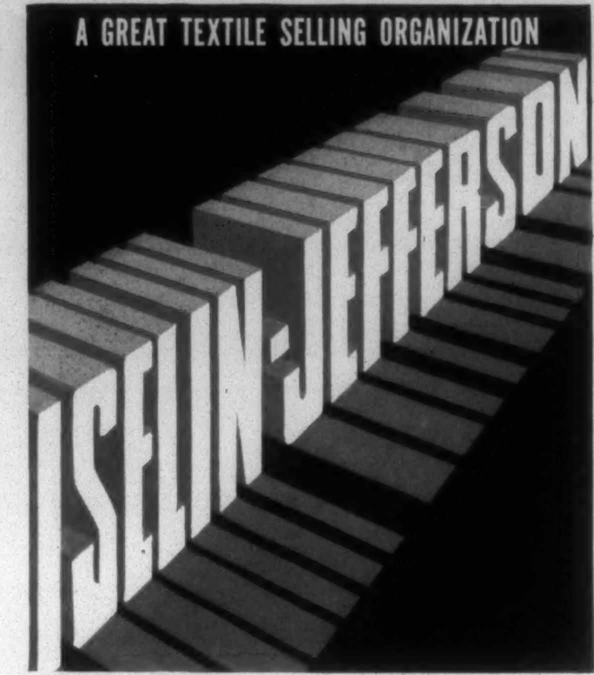
American Viscose Shows Financial Gain

Net profit of American Viscose Corp. for the year ended Dec. 31, 1945, excluding an estimated recovery of $5,000,000 of prior years taxes on income, amounted to $5,191,526 which, after preferred dividends, was equal to $2.32 per share of common stock, according to the annual report. This compared with net profit for 1944 of $5,129,940 or $2.28 per share of common stock. Net sales in 1945 amounted to $119,375,886 as compared with $108,483,400 in 1944, an increase of ten per cent.

Current assets on Dec. 31 were $74,139,974 and current liabilities $11,338,551. The current assets at the end of the year included $42,468,000 in cash and government securities. During 1945, the expenditures for additions to plant and equipment amounted to $10,189,000 of which $7,646,000 was expended for the expansion of the company's plant at Front Royal, Va.

Lifting Of Textile Ceilings Is Discussed

The views of five Charlotte citizens on the question "Should O.P.A. Ceiling Prices Be Lifted From Textiles?" recently were "aired" in the American Broadcasting Co.'s weekly national program, "Question For America." Participating on the program picked up from five key stations over the nation were R. S. Dickson, head of R. S. Dickson & Co. and affiliated with a number of large textile enterprises; Dr. W. P. Jacobs, president of the American Cotton Manufacturers Association; Charles A. Cannon, head of Cannon Mills, Kannapolis, N. C., and three Charlotte textile workers, Mrs. W. L. Hinson, Mrs. Edward McManus and B. P. Helms.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ACME STEEL CO., 2838 Archer Ave., Chicago, Ill. Sou. Office and warehouse, 603 Stewart Ave., S. W., Atlanta, Ga., F. H. Webb, Dist. Mgr. Sou. Sales Reps.: C. A. Carrell, 523 Clairmont Ave., Decatur, Ga., Phone Dearborn 6267; Marcus M. Brown, 1231 Lexington Ave. (Phone 8583), Charlotte, N. C.; William G. Polley, 937 Cherokee Lane, Signal Mountain, Tenn., Phone Chattanooga 8-2635; John C. Brill, 309 Magazine St., New Orleans, La., Phone Magnolia 5859. Warehouses at Atlanta, Ga., Greenville, S. C., New Orleans, La.

AKRON BELTING CO., THE, Akron, O. Sou. Reps.: Ralph Gossett and Wm. J. Moore, 15 Augusta St., Greenville, S. C.; The Akron Belting Co., 406 S. 2nd St., Memphis, Tenn.; Oliver D. Landis, N. C. Agent, 718 Queens Rd., Charlotte 4, N. C.

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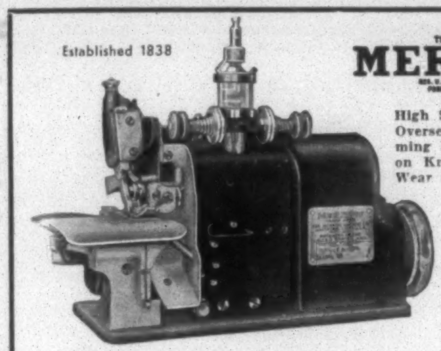

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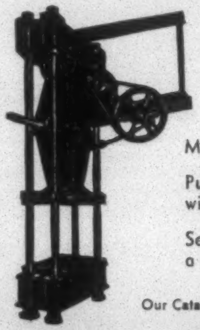

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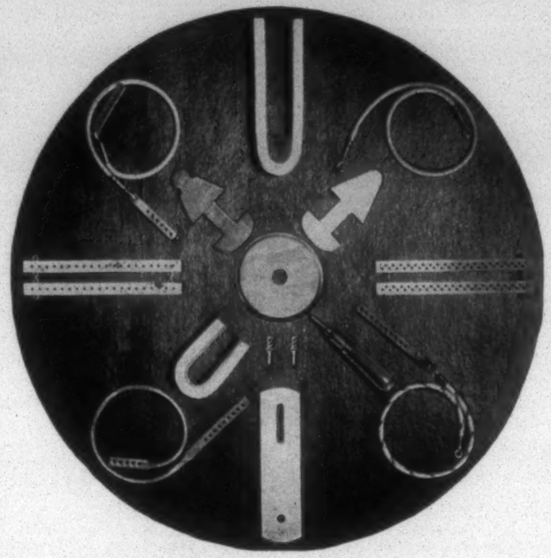

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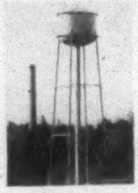

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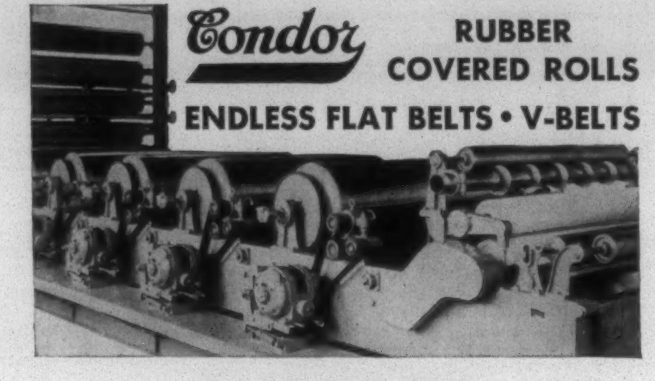

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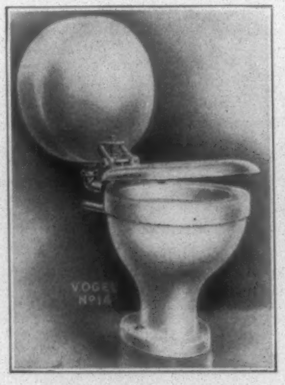

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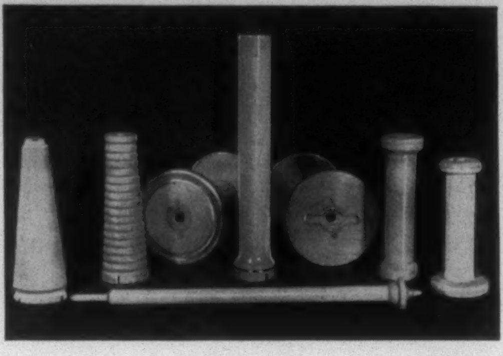

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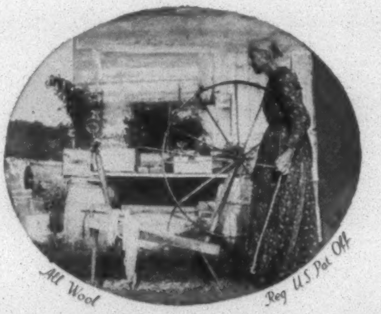

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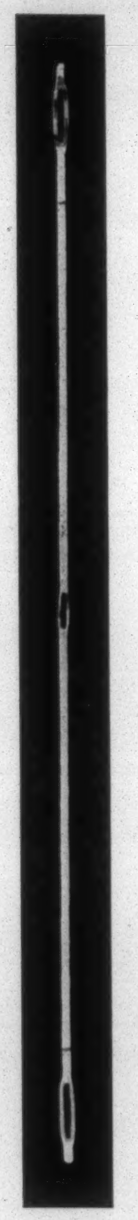

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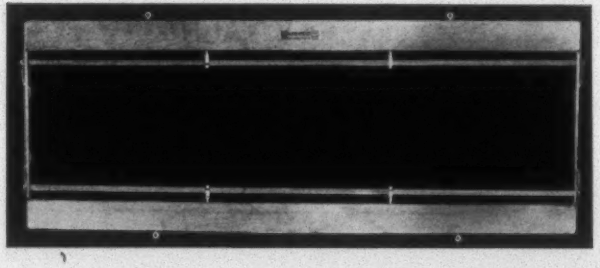

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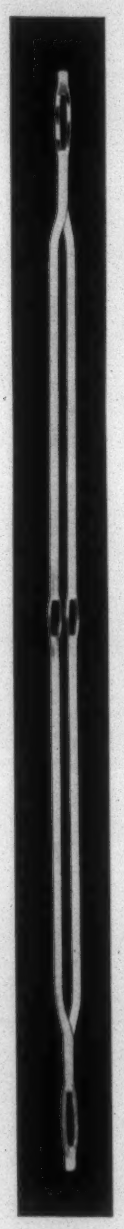

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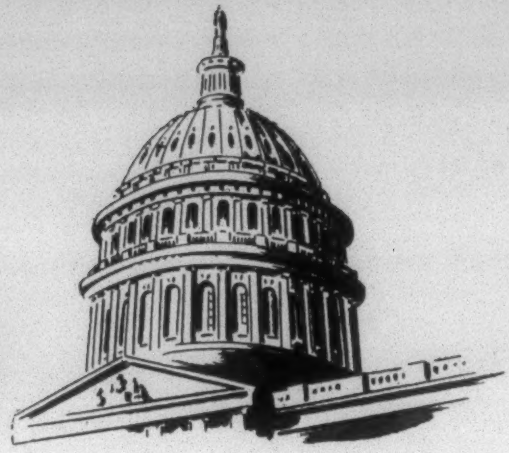
WATCHING WASHINGTON



[Exclusive and Timely News from the Nation's Capital]

HARRY TRUMAN, ENTERING HIS SECOND YEAR, is becoming more decisive, speaking out more sharply, asserting himself more in tight situations, and moving in to settle things rather than act as a referee, but his relations with Congress are not improving. Troubles with Congress are real and large. His initial reconversion legislative program has been whittled down and emasculated into unrecognizable measures, put through by a coalition, and will probably get his veto. He's been told the next Congress will probably be no more friendly than this one. Personal feuds rage between his conservative advisers and the New Deal holdovers, and Congress directs hot blasts of criticism at both groups. The President is working very hard, often until fatigue stops him, and he's taking little time for relaxation. Physicians are urging a slower pace, because his health may become a matter of concern.

Under Congressional mandate, price controls after July 1 will automatically cease when the shortage in a commodity becomes less than "urgent." Monthly statements to the President on conditions in supply and demand will be required from governmental agencies, and available to Congress. Arbitrary powers will be removed from Bowles and Porter, and O. P. A.'s discretion, and authority to retail ceilings, will be limited to goods and products in current "urgent" shortage. Sharpest cuts in its powers will be in the clothing and food fields, especially women's clothing and meat products.

Philip Murray, working the other side of the street, is alarmed at the speed with which O. P. A. is lifting price controls, and at "the frequency and generosity" of the raises. He insists the cause is not recent wage increases, but due to "selfish lobby groups," aided by some Congressmen, in "adding to already swollen profits." He fails to raise the point that wage increases should come out of profits, but says price controls should be "firmly held so this nation will not be surrendered to inflation and economic ruin."

The minimum wage bill, setting a floor of 65 cents, emerged from the Senate with more added provisions than any senator could enumerate offhand. The Russell farm parity rider, actually favored by few, shattered an Administration-coalition compromise, and opened the gate to a flood of amendments. The House Labor Committee shows no disposition to report this bill to the House, where probably even worse things await it. It looks like a dead duck.

Minority members of the Senate Labor Committee are applying pressure to force the House-passed Case Labor Bill to the Senate floor. The majority delayed reporting the bill for over three weeks. The minority filed a report ahead of bringing out the bill, saying they would offer amendments to "put teeth" in it to "correct the inequities in existing labor law and restore the balance between labor and management," which they asserted the bill failed to do "by a wide margin" or to set up "minimum requirements to protect the public interest." It is virtually certain the bill will be amended to conform with the Case bill, and passed in a form acceptable to the House.

Prices are rising and all prices are expected to move into moderately higher levels in the second half of the year. Production is increasing, too, but industry is not yet geared to turn out goods to meet the pent-up demand of four war years. Over-all retail sales are 25 per cent above last August, but much of the buying is to avoid higher prices later. As production now approaches full stride, indication is that the price rise will be held in line and not become runaway.

Members of Congress are becoming increasingly dubious over the prospect of "full employment at high wages." Technological advances are not keeping up with the recent round of wage increases, and wartime experience showed that a let-down in individual effort went with job security. The Administration has hoped that efficiency would improve fast enough to offset wage rises, with something left over as new investment capital to provide new jobs, but it's not working out that way. As production increases, and prices are higher, it's expected there will be more buyers' resistance, and the dream of full employmnt at record high wages may be a myth.

C. I. O. headquarters will be set up in Atlanta for its $1,000,000 organizing drive in the Southern states. The campaign has the dual purpose of organizing workers, and of electing friendly state and national legislators and public officials.

An increase of 1/2 of one per cent in payroll taxes for employer and employee alike next year becomes a growing possibility as the House Ways and Means Committee wrestles with the problem of keeping the old-age retirement system solvent. The increase would add $2,000,000 a day to joint payroll taxes, and bring in $750,000,000 a year. If coverage is extended, benefits increased, retirement age lowered, or health insurance added, an additional payroll tax of one per cent for any one of these things, for employer and employee each, will be required. The 1/2 of one per cent increase is deemed necessary to keep the present system solvent, and would be for only one or two years before another rise.

A compromise for the return of U.S.E.S. to the states in either September or December has been agreed to by Administration forces, faced with certain defeat on retaining Federal control. The compromise has a clause for recapture by the Secretary of Labor if any state fails to comply with existing Federal standards. Authority to enforce such standards would match similar authority in compliance with the Social Security Act. The recapture proposal will meet stiff opposition in the House, and chances of adoption are slim.

Man-days lost by strikes in February, says the Bureau of Labor Statistics, was the highest on record, mounting to 21,500,000 man-days, or 3.94 per cent of the available working time. There were 460 stoppages in progress during the month, involving 1,430,000 workers.

The housing shortage, with soaring building costs, presents the Administration's most alarming problem, with a dangerous boom taking form. The Administration fears a bad bust may follow as new houses are built and buyers resist boom prices. The bursting bubble could spread beyond the housing field.

The Government's vast subsidized home building program in the making will get under way in a muddle. It's so large and complicated it faces the chance of either blowing up or being drastically modified. Serious local problems will arise as low-cost housing is put around the fringe of communities, without adequate community facilities. Millions of dollars will be poured in, but the ultimate result may be only the creation of new "shack towns."

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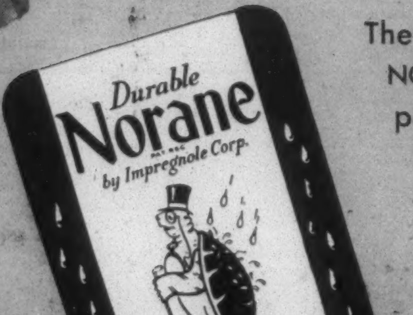

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